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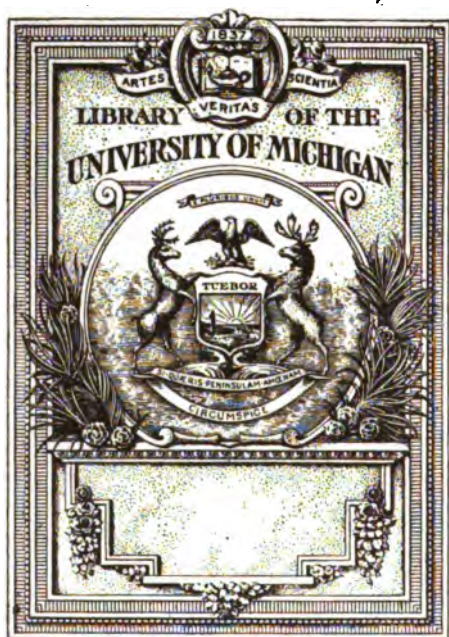
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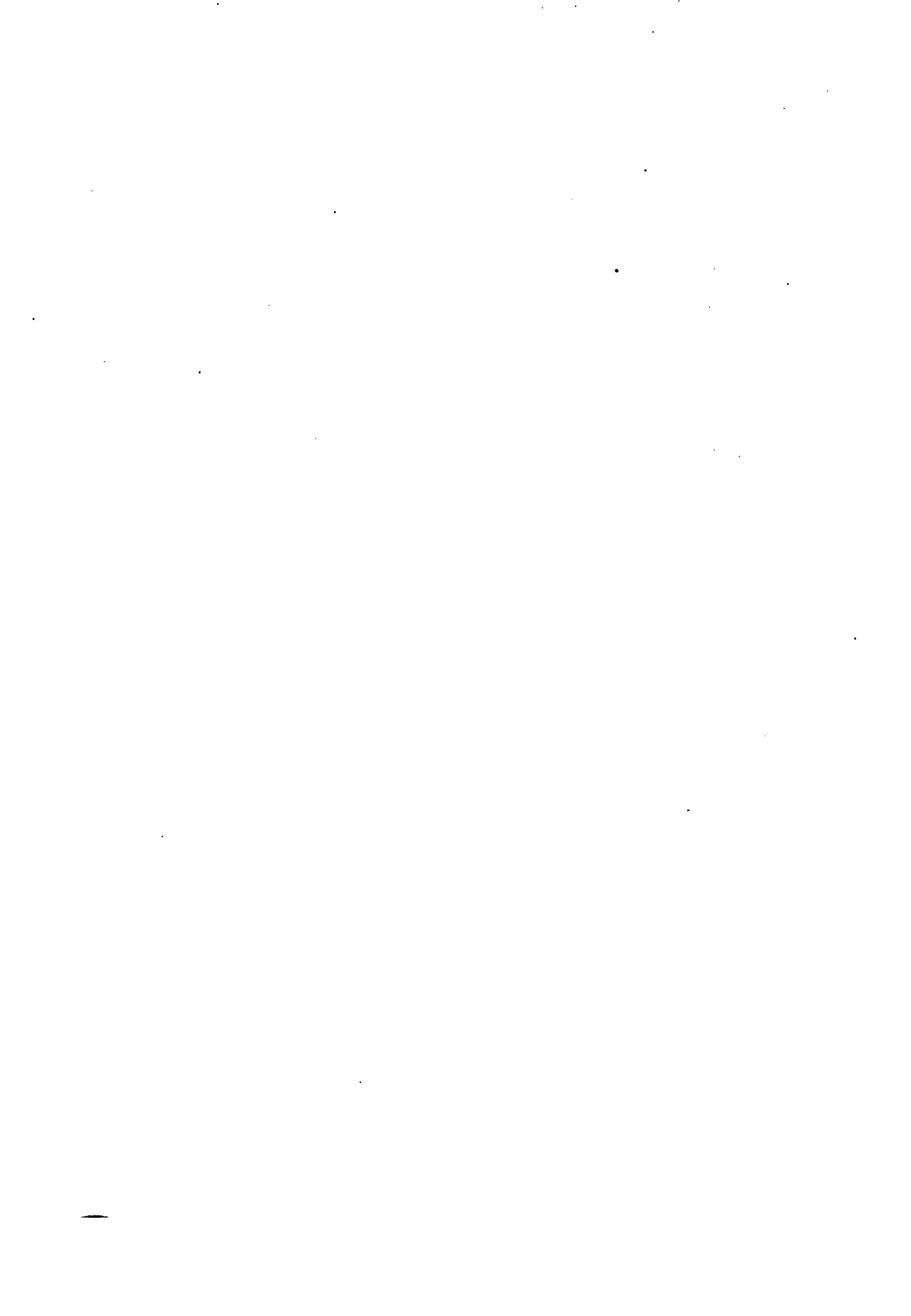
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C L A S S I F I E D C. P. A. PROBLEMS AND SOLUTIONS—1915

Arranged by

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School of Commerce, Accounts and Finance.

Covering the More Important Questions Given in
the 1915 Examinations of the Following States:

ARKANSAS

DELAWARE

FLORIDA

KANSAS

LOUISIANA

MAINE

MARYLAND

MASSACHUSETTS

MICHIGAN

MINNESOTA

MISSOURI

NEBRASKA

NEVADA

NEW YORK

OHIO

OREGON

PENNSYLVANIA

SOUTH CAROLINA

WASHINGTON

WISCONSIN

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PREFACE

This book has been prepared for the purpose of providing applicants for the degree of Certified Public Accountant, with the most important problems relating to accounting and auditing selected from all the available C. P. A. examination questions given in the year 1915 in the various states, together with complete answers and solutions to the same. Space has not permitted the inclusion of questions on commercial law.

The author has selected those questions that seemed to be most representative and most useful to the student, and has classified these according to their subjects. Because of the necessity of selecting questions which are representative, it has not been possible to take these questions in even approximately the same numbers from each state. Wherever essentially the same subject has been brought out in the different state examinations, the questions have been grouped and one answer given for all. Where it has been possible, answers to questions have been quoted from the accepted authorities on accounting.

Too frequently in the presentation of C. P. A. accounting problems, questions involving technical points and "catches" have been preferred, and the more important questions involving system and procedure have been omitted. The "catches" and the technical questions have not been ignored in the present volume, but most of the problems given are those which cover general matters of system and procedure. In a few cases lengthy and somewhat involved problems concerning the designing of accounting systems and the necessary forms therefor have been included. The work also contains a fairly complete discussion of those mooted

questions on which accountants hold opposing theories. Many of the C.P.A. questions called for definitions of various technical and accounting terms. An alphabetical list of all the terms called for by these questions, with definitions by the best authorities, has been prepared and will be found at the back of the book.

The author desires particularly to thank Earl A. Saliers, of the Sheffield Scientific School of Yale; Hugo Kuechenmeister, B.A., C.P.A., Instructor of Business Administration, University of Wisconsin; John T. Madden, C.P.A., Assistant Professor of Accounting, New York University; Frederick S. Todman, M.C.A., Lecturer, New York University; Leroy T. Perrine, Ph.B., C.P.A., Lecturer, New York University; D. C. Eggleston, M.E., C.P.A.; and Arthur Wolff, C.P.A., and many others who have assisted in the preparation of the answers. The author is also indebted to Paul-Joseph Esquerré, C.P.A., John H. Schnackenberg, LL.B., C.P.A., and Hazen P. Philbrick, A.M., C.P.A., for many solutions appearing in the "1915 C.P.A. Problems and Solutions" that did not admit of improvement.

The author trusts that his work may prove of use, not only to those preparing for examination, but to the accounting profession at large, as indicating the present trend of professional accountants' examinations.

HENRY C. COX

New York,
December 4, 1916.

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Classified C. P. A. Problems and Solutions—1915

ACCOMMODATION ACCOUNT

Question I ✓

A is a superintendent in the employ of X & Y, a firm of manufacturers, and has an interest in the profits. On September 8, 1914, X & Y indorse A's \$3,500 note, due in six months with interest at 6%. X & Y charge the fee of 1% (\$36.05) to A's account on the firm's books. A sells this note to a private note broker. On March 10, 1915, X & Y pay \$3,607.50, inclusive of protest fees, to the holder of the note which A had permitted to be dishonored. What entries are necessary on the books of X & Y to record the transaction? (New York, June, 1915.)

Answer

September 8, 1914

A, Drawing Account.....	\$36.05	
To Indorser's Fees.....		\$36.05
Consideration for the indorsement of A's note, dated September 8, 1914, due March 8, 1915, for \$3,500 with interest at 6%.		

September 8, 1914

A, Accommodation Account.....	3,605.00	
To Indorser's Liability.....		3,605.00

CLASSIFIED C. P. A. PROBLEMS

To record the contingent liability incurred through indorsement of A's note for \$3,500 with interest dated September 8, 1914, due March 8, 1915.

March 10, 1915

Indorser's Liability.....	3,605.00	
A, Drawing Account.....	2.50	
To Cash.....		3,607.50

To record the payment of contingent liability on A's note made absolute through A's dishonor, inclusive of protest fees.

March 10, 1915

A, Drawing Account.....	3,605.00	
To A, Accommodation Account.....		3,605.00
Note made by A dated September 8, 1914, dishonored March 8, 1915, and paid by firm as indorsers, charged against A's personal account.		

ACCOUNTING SYSTEMS

Question I

What general principles should govern a public accountant in the establishment of a system of accounts in any business? (Louisiana, 1915.)

Question II

In devising an accounting system for a business, what are the principal matters to be considered by the accountant, and in what order should they have attention? (South Carolina, 1915.)

Question III

Enumerate the fundamental principles to be followed in devising an accounting system for a large mercantile company. (Nebraska, 1915.)

Answer to Questions I - III

In devising an accounting system for any business, the accountant should keep in mind the fundamental necessity for obtaining the proper combination of accuracy, simplicity, thoroughness, permanency, elasticity, and dispatch. The result desired for the system is a maximum of usable and helpful information with a minimum of cost. The records should be designed to meet current needs and to allow for expansion in the future. Methods should be as simple as possible and yet the accounts should be analytical enough to give complete and comprehensive information promptly. The system should provide for a logical distribution of work and for a proper classification of receipts and expenditures which shall be accurate and reliable. It should provide for complete and lasting records which shall be maintained at the smallest possible expense.

It is necessary for the business man of today to have a system of accounting which shall not only provide for accurate bookkeeping, accessible records, and complete information, but shall in addition readily lend itself to the preparation of financial statements and to the compilation of needed statistics. The business man desires to know his production, sales, expenses, costs, receipts, outstanding accounts, and numerous other and widely varying kinds of information so as to make reliable estimates for the future.

The business should be studied in detail, and the system should then be designed to fit the needs of the business. A great deal depends on the proper classification of accounts. The work should be so divided that the details may move forward logically without interruption or too much dependence on other departments. Mechanical contrivances may be used to good advantage in certain cases.

All these things should be taken into consideration so

that the system shall produce all the results desired and shall in addition contribute to the efficiency of the organization as a whole.

Question IV ✓

The accounting department of a jobbing house, consisting of five men, keeps the books, does the billing, makes city collections, handles the general and petty cash, and pays the invoices of the company.

On what general lines would you distribute the work of the department to secure the best internal check? (Massachusetts, 1915.)

Answer

The exact division of the work would, of course, depend upon the particular circumstances, but it might be arranged for one person to keep the general ledger and record the invoices, a second to handle the cash, a third to keep the sales ledger, a fourth to do the billing, and a fifth to make collections, etc. An important feature is to have the cash book and the ledgers kept by different persons. It is also well, if feasible, for some of the persons to exchange duties at times, and vacations should be insisted upon.

ACCOUNTS, CLASSIFICATION OF

Question I

Classify and group the following accounts of a manufacturing company according to kind of asset, liability, loss and gain:

- | | |
|---|---|
| 1. Accounts Payable | 37. Miscellaneous Factory Expenses |
| 2. Accounts Receivable | 38. Miscellaneous Selling Expenses |
| 3. Accrued Salaries and Wages | 39. Non-productive Labor |
| 4. Advertising | 40. Office Equipment |
| 5. Bad Debts Written Off | 41. Office Salaries |
| 6. Bills Payable | 42. Officers' Salaries and Expenses |
| 7. Bills Receivable | 43. Organization Expenses |
| 8. Bond Discount | 44. Patent Rights |
| 9. Bond Premium | 45. Patterns and Drawings |
| 10. Bond Interest Accrued | 46. Plant Site |
| 11. Capital Stock | 47. Plant Buildings |
| 12. Cash | 48. Plant, Machinery, and Equipment |
| 13. Credit Department Expenses | 49. Productive Labor |
| 14. Depreciation of Buildings, Machinery, and Plant | 50. Purchasing Department Expenses |
| 15. Depreciation of Workmen's Cottages | 51. Raw Materials Purchased |
| 16. Directors' Fees | 52. Rent of Workmen's Cottages |
| 17. Discount on Purchases | 53. Reserve for Depreciation of Buildings, Machinery, and Plant |
| 18. Discount on Sales | 54. Reserve for Depreciation of Workmen's Cottages |
| 19. Federal Corporation Tax | 55. Reserve for Doubtful Accounts |
| 20. First Mortgage Bonds | 56. Reserve for Sinking Fund |
| 21. Freight and Cartage Inward | 57. Returns and Allowances on Purchases |
| 22. Freight and Cartage Outward | 58. Returns and Allowances on Sales |
| 23. General Office Expenses | 59. Sales of Manufactured Goods |
| 24. Good-Will | 60. Sales of Waste Material |
| 25. Insurance | 61. Sales Agents' Commissions |
| 26. Insurance Premiums Unexpired | 62. Salesmen's Salaries |
| 27. Interest on Bills Payable | 63. Salesmen's Expenses |
| 28. Interest on Bonds | 64. Sinking Fund Investments |
| 29. Income from Investments | 65. Surplus |
| 30. Inventory, Raw Materials | 66. Taxes on Plant and Equipment |
| 31. Inventory, Goods in Process | 67. Taxes Accrued |
| 32. Inventory, Manufactured Goods | 68. Workmen's Cottages |
| 33. Investments (Outside) | |
| 34. Maintenance of Buildings, Machinery, and Plant | |
| 35. Maintenance of Workmen's Cottages | |
| 36. Manufacturing Power, Heat, and Light | |

(Wisconsin, 1915.)

Answer to Question I

The above accounts should be classified as follows:

ASSETS**Current:**

- (12) Cash
- (7) Bills Receivable
- (2) Accounts Receivable
- (30) Inventory, Raw Materials
- (31) Inventory, Goods in Process
- (32) Inventory, Manufactured Goods
- (33) Investments (Outside)
- (64) Sinking Fund Investments

Fixed:

- (40) Office Equipment
- (46) Plant Site
- (47) Plant Buildings
- (48) Plant, Machinery, and Equipment
- (45) Patterns and Drawings
- (68) Workmen's Cottages

Intangible:

- (24) Good-Will
- (44) Patent Rights

Deferred Charges:

- (8) Bond Discount
- (43) Organization Expenses
- (26) Insurance Premiums Unexpired

LIABILITIES**Current:**

- (6) Bills Payable
- (1) Accounts Payable

Accruals:

- (3) Accrued Salaries and Wages

- (67) Taxes Accrued
- (10) Bond Interest Accrued

Funded:

- (20) First Mortgage Bonds

Deferred Credits:

- (9) Bond Premium

RESERVES (CREDIT ACCOUNTS)

- (53) Reserve for Depreciation of Buildings, Machinery, and Plant
- (54) Reserve for Depreciation of Workmen's Cottages
- (55) Reserve for Doubtful Accounts
- (56) Reserve for Sinking Fund

CAPITAL

Capital:

- (11) Capital Stock
- (65) Surplus

LOSSES

Operating Expenditures:

Manufacturing:

- (57) (51) Raw Materials Purchased (Less Returns and Allowances)
- (21) Freight and Cartage Inward
- (49) Productive Labor
- (50) Purchasing Department Expenses
- (39) Non-productive Labor
- (66) Taxes on Plant and Equipment
- (36) Manufacturing Power, Heat, and Light
- (14) Depreciation on Buildings, Machinery, and Plant

- (37) Miscellaneous Factory Expenses
- (34) Maintenance of Buildings, Machinery, and Plant

Selling:

- (4) Advertising
- (13) Credit Department Expenses
- (22) Freight and Cartage Outward
- (61) Sales Agents' Commissions
- (62) Salesmen's Salaries
- (63) Salesmen's Expenses
- (38) Miscellaneous Selling Expenses
- (5) Bad Debts Written Off

Administrative:

- (41) Office Salaries
- (42) Officers' Salaries and Expenses
- (25) Insurance
- (16) Directors' Fees
- (19) Federal Corporation Tax
- (43) Share of Organization Expenses
- (23) General Office Expenses

Financial:

- (18) Discount on Sales
- (27) Interest on Bills Payable
- (28) Interest on Bonds
- (8) Proportion of Bond Discount
- (15) Depreciation of Workmen's Cottages
- (35) Maintenance of Workmen's Cottages

GAIN

Operating:

- (59) (58) Sales of Manufactured Goods (Less Returns and Allowances)
- (60) Sales of Waste Material

Financial:

- (17) Discount on Purchases
- (29) Income from Investments
- (52) Rent of Workmen's Cottages
- (9) Proportion of Bond Premium

Question II ✓

State which of the following should be charged or credited to capital and which to revenue:

- (a) Repairs to machinery and plant.
- (b) Replacements of machinery and plant.
- (c) Royalties on machines owned and used by the company owning the patents, similar machines being leased under royalty to competitors.
- (d) Brokerage on a piece of property purchased.
- (e) Costs attending a mortgage given.
- (f) Costs of patents, including lawyer's charges and government fee.
- (g) Expenses of incorporating a company.
- (h) Discount on bonds sold.
- (i) Premium on bonds sold. (Wisconsin, 1915.)

Answer

- (a) Revenue.
- (b) Capital for increase over old valuation; otherwise revenue.
- (c) Revenue; a credit to offset this charge will be in the non-operating revenue.
- (d) Capital.
- (e) Revenue.
- (f) Capital.
- (g) Capital and prorate over period.

- (h) Capital and prorate over period.
- (i) Capital and prorate over period.

Question III ✓

- (a) Explain the treatment you would give the following in the books of account.
- (b) State the counterbalancing or offsetting accounts.
- (c) Explain how they would appear in the balance sheet.
 - 1. Notes receivable discounted.
 - 2. Actions pending against your client.
 - 3. Cumulative preferred dividends payable.
 - 4. Liability as guarantor for third parties.
 - 5. Liability as accommodation signer on note.
 - 6. Contingent liabilities under contracts.
 - 7. Unpaid balances on contracts not yet fulfilled.
 - 8. Collateral in possession of your banker to secure payment of a note. (Wisconsin, 1915.)

Answer

1. (a) Entry when note is discounted:

Cash

To Notes Receivable Discounted

Entry when note is paid:

Notes Receivable Discounted

To Notes Receivable

- (b) Counterbalancing account shown under (a).
- (c) Would appear on balance sheet as a subtraction from notes receivable.

2. (a) Would not be treated in books of account.
 (b) None.
 (c) Would not appear in balance sheet; should be mentioned in report.
3. (a) If not declared, it would not be recorded in the books of account, but should be mentioned in footnote to balance sheet.

If declared, the following journal entry is made:

Surplus

To Cumulative Preferred Dividend Declared

And upon payment of the same:

Cumulative Preferred Dividend Declared

To Cash

- (b) Shown under (a).
- (c) Should appear on balance as a liability.
4. (a) Not shown on books of account.
 (b) None.
 (c) Not shown in balance sheet; should be mentioned in report.
5. (a) Should be entered on books of account in a memorandum wash account; "Liability on Notes Indorsed" would be an acceptable title for the credit account.
 (b) Contra account could be entitled "Contingent Asset—Notes Indorsed as Accommodation."
 (c) Should appear on both sides of the balance sheet.
6. (a) Not carried on the books of account.
 (b) None.
 (c) Should be shown in footnote to balance sheet—complete detailed statements shown elsewhere in report.

7. (a) If due, carried as accounts receivable; if not due, not carried on the books.
(b) Proper contra account to Accounts Receivable.
(c) If not due, treated as contingent asset and shown in footnote to balance sheet.
 8. (a) Not necessarily separate in the books of account.
(b) No contra account.
(c) Such assets should be separately classified, clearly labeled, and shown on the balance sheet as having been hypothecated.
-

ACCRUALS

Question I ✓

Describe *three* methods of treating accruals and state the advantage or the weakness of each method. (New York, January, 1915.)

Answer

First Method. Record them at the end of an accounting period, and reverse the entry at the beginning of the next.

Second Method. Record monthly the asset or the liability which has accrued, in order that each month may be given credit for its share of income or expense. When collecting the asset as at a coupon date, credit the asset accrued, thereby insuring the perfect working of the method which requires that the debit side of the assets represent at all times the credit side of the income which it brings about. If anything happens to the asset during the period, the effect must be recorded in the income account. This applies particularly to the sale of securities during a particular

month, it being true that at the time of the sale the whole amount of interest sold is not as yet recorded either as an asset or as an income. The same theory applies to accrued liabilities.

Third Method. Do not record accruals in any way until the asset is collected, or the liability is paid; at that time, record the income or the expense.

The third method is bad, in that it fails to spread the income and the expenses over the periods in which they were made or incurred, and a subsequent period is wrongly charged or credited with such items. Further, it fails to reflect liabilities and assets accrued and not as yet due or receivable at the end of any period.

The first method is not quite satisfactory; although the income and the expenses are spread over the period creditable or chargeable with them, no record of the asset is left on the books between closing dates.

The second method is scientific and essentially satisfactory.

AMORTIZATION, ANNUITIES, PRESENT WORTH*

Question I

If a principal of one dollar will amount to \$3.3863549 in 25 years, at 5% per annum, what would be the present value of an annuity of \$1,250 for 30 years at the same rate? (Ohio, 1915.)

Answer

The solution of this problem is based upon the fact that

*See also "Bond Amortization and Sinking Funds."

the present worth of an annuity of \$1 for a given period and at a given rate is equal to the compound discount on \$1 for this period and at this rate, divided by the rate of interest per period.

If \$1 in 25 years at 5% per annum will amount to \$3.3863549, then in 30 years, by five successive multiplications by 1.05, \$1 will amount to \$4.3219423. If \$1 amounts to this figure, then by division, \$.2313775 will amount to \$1 on the same basis. From this result we obtain the fact that the compound *discount* on \$1 for 30 years at 5% per annum is \$.7686225. Dividing this figure by the annual rate, .05, we obtain \$15.37245 as the present worth of an annuity of \$1 for 30 years at 5% per annum. The present worth of a like annuity of \$1,250 would be \$19,215.56, which is the answer to the problem.

This solution is based upon the assumption that the annuity is payable at the *end* of each year, which is ordinarily the case, and *not* at the *beginning* of each year.

Question II

A company purchased a piece of real estate for \$100,000. The terms of payment agreed upon were \$10,000 each year thereafter, without interest, until the whole \$100,000 was paid. At the end of the fourth year, twelve months before the fifth payment was due, the company found itself possessed of considerable available cash, and decided to relieve itself of the liability specified by depositing one amount sufficient to pay the annual instalments as they matured. The bank agreed to pay 5% per annum on all money deposited for that purpose.

What is the single amount which the company must deposit, at 5%, to pay the yearly instalments as they mature? (Florida, 1915.)

Answer

At the end of the fourth year, four instalments will have been paid, leaving six instalments of \$10,000 each still to be paid. The problem therefore is reduced to finding the present worth of an annuity of \$10,000 payable at the end of each of six years at 5% per annum. There are several ways of solving this problem, but, assuming that in the examination room algebraic formulas and mathematical tables are not available, probably the surest method of solution, even if a little longer, is the process of long division, as follows:

$\$10,000 \div 1.05 = \$9,523.81$	Present worth at end of 4th year of instalment due at end of 5th year.
$\$10,000 \div (1.05)^2 = 9,070.29$	Present worth at end of 4th year of instalment due at end of 6th year.
$\$10,000 \div (1.05)^3 = 8,638.38$	Present worth at end of 4th year of instalment due at end of 7th year.
$\$10,000 \div (1.05)^4 = 8,227.02$	Present worth at end of 4th year of instalment due at end of 8th year.
$\$10,000 \div (1.05)^5 = 7,835.26$	Present worth at end of 4th year of instalment due at end of 9th year.
$\$10,000 \div (1.05)^6 = 7,462.15$	Present worth at end of 4th year of instalment due at end of 10th year.
<u><u>\$50,756.91</u></u>	Grand total, which is the single amount required at the end of the 4th year.

AUDIT AFTER FIRE**Question I**

A firm whose accounts have been audited annually for a number of years loses, through fire, all its receipted expense bills for the past year, which have not yet been

audited. All the other records are saved. The accountant is requested to make the annual audit as usual. How should he proceed to satisfy himself with respect to the expenses for which the vouchers are missing? (New York, January, 1915.)

Answer

The accountant may take an abstract of either the cash book or the check book stubs for the missing items. Having made a schedule of these, he may have them audited by the firm auditor from this list, or he may have duplicate receipts made out and have these signed by the persons to whom the payments were made.

Either method will give him sufficient ground on which to proceed.

Question II

In case a fire has completely destroyed the stock of merchandise of a manufacturing firm and no stock account has been kept, how may the merchandise loss be determined? (Nebraska, 1915.)

Question III

→ The store and stock of the Diamond Jewelry Company was destroyed by fire on November 1. The safe was opened and the books were recovered intact. The trial balance taken off was as follows:

Cash in Bank.....	\$1,000.00	
Accounts Receivable.....	10,000.00	
Accounts Payable.....		\$30,000.00
Merchandise Purchases.....	90,000.00	
Furniture and Fixtures.....	7,500.00	
Sales		110,000.00
General Expense.....	18,000.00	
Insurance	1,500.00	

Salaries	5,500.00	
Real Estate—Store Lot.....	50,000.00	
Store Building.....	35,000.00	
Capital Stock.....		50,000.00
Surplus		28,500.00
	<u>\$218,500.00</u>	<u>\$218,500.00</u>

The average gross profit as shown by the books and accepted by the insurance companies was 40% of sales. The insurance adjuster agreed to pay 75% of the book value of furniture and fixtures, 90% of the book value of the store building, and the entire loss on merchandise stock.

Draft journal entries to include the account against the insurance companies, and construct final profit and loss account and balance sheet. (Florida, 1915.)

Answer to Questions II and III

The solution given below is sufficient explanation to constitute an answer to the first question.

The journal entries required, which show the accounts against the insurance company, are as follows:

Inventory (New).....	\$24,000.00	
To Merchandise Purchases.....		\$24,000.00
To reduce the Purchase account to an amount equal to 60% of sales:		
Sales	\$110,000.00	
60%	\$66,000.00	
Inventory	24,000.00	
Purchases	\$90,000.00	
Insurance Company.....	24,000.00	
To Inventory (New).....		24,000.00
Charging insurance company with entire loss.		

Insurance Company.....	5,625.00	
Fire Loss.....	1,875.00	
To Furniture and Fixtures.....		7,500.00
To charge insurance company with 75% of loss.		
Insurance Company.....	31,500.00	
Fire Loss.....	3,500.00	
To Store Building.....		35,000.00
To charge insurance company with 90% of loss.		

DIAMOND JEWELRY COMPANY

BALANCE SHEET

November 1, 19..

<i>Assets</i>		<i>Liabilities</i>	
Current Assets:		Current Liabilities:	
Cash	\$1,000.00	Accounts Payable.....	\$30,000.00
Accounts Receivable...	10,000.00	Capital Stock.....	50,000.00
Due from Insurance Co.	61,125.00	Surplus	\$28,500
		Add Net Profit,	
		from Profit and	
	\$72,125.00	Loss Statement 13,625	42,125.00
Real Estate.....	50,000.00		
	<u>\$122,125.00</u>		<u>\$122,125.00</u>

DIAMOND JEWELRY COMPANY

PROFIT AND LOSS STATEMENT

For Period Ended November 1, 19..

Sales		\$110,000.00
Less Cost of Goods Sold:		
Purchases	\$90,000.00	
Less Estimated Inventory.....	24,000.00	66,000.00
Gross Profit on Sales.....		<u>\$44,000.00</u>
Less Expenses:		
General Expense.....	\$18,000.00	

AUDIT, BALANCE SHEET

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Insurance	1,500.00	
Salaries	5,500.00	25,000.00
Net Profit on Operation.....		\$19,000.00
Less Fire Loss:		
25% of Furniture and Fixtures.....	\$1,875.00	
10% of Building.....	3,500.00	5,375.00
Net Profit—Carried to Balance Sheet.....		<u>\$13,625.00</u>

AUDIT, BALANCE SHEET

Question I

A manufacturing concern on closing its books at the end of the fiscal year finds that they show a loss, whereas, there is good ground for the belief that a profit was earned.

With a view to settling the question, what particular accounts, etc., would you examine and how? (Massachusetts, 1915.)

Answer

The difficulty in such cases is usually to be found in some part of the merchandise account. Compute the gross profit percentage and compare with previous years. If a discrepancy appears, investigate the inventories as to comparative prices, goods out on consignment, goods shipped but not billed, goods in transit, etc.

Of course, this condition might also arise from causes not connected with merchandise, though much less frequently. Capital items charged to revenue accounts, such as Repairs account, will produce the result; and a defalcation would do the same. It may also happen that the anomalous condition is due, not to anything within the past fiscal year, but to an erroneous balance sheet at the beginning of the year, such as an inflated inventory at that time.

In practice, what is to be done will depend on the circumstances of the particular case, but an important first step is to make a rough balance sheet audit, to verify the actual present condition so far as practicable without taking time to go into details.

Question II

In order to verify the correctness of a balance sheet, what course should be followed in auditing a corporation where the volume of transactions is so large that a detailed checking is impracticable? (Massachusetts, 1915.)

Answer

The brief answer is: Make a balance sheet audit. Verify the assets, verify the liabilities, and see that the liabilities were incurred for reasonable and proper purposes. Of course, in a large business there should be proper internal checks, and for this reason detailed checking should be unnecessary.

Question III

→ In performing an audit, you find on checking the customers ledger a number of accounts with credit balances; likewise, in checking the creditors ledger, you find a number of debit balances. How should amounts of this character be treated in the balance sheet? (New York, June, 1915.)

✓ 7

Answer

A credit balance in a customer's account represents a liability or deferred credit of the business to the customer,

and should therefore under no consideration be treated as a deduction from the accounts receivable, but placed on the balance sheet under some appropriate caption, as "Accounts Payable," "Deposits by Customers," etc. Similarly, debit balances in the creditors ledger represent assets or payments in advance and therefore should be placed on the balance sheet under the caption "Accounts Receivable," "Merchandise in Transit," "Advance Payments on Contracts," or any other appropriate asset or deferred debit account.

Question IV

The Merchants' Co-operative Manufacturing Company sells its products to retailers who are stockholders in the company. Shares of capital stock are sold at a premium; and retailers are induced to become stockholders by the argument that they can buy superior goods not only at low prices but eventually share in the distribution of profits by dividends on capital stock holdings. Goods shipped to retailers are billed at selling prices to be paid for when sold or, in any event, within six months.

The published balance sheet of the company at the close of the first year's business, is as follows:

Assets

Brands, Trade-Marks, and Copyrights.....	\$100,000.00
Cash	15,000.00
Inventories	100,000.00
Due from Dealers on Shipments.....	60,000.00
Organization Expenses.....	36,000.00
Furniture and Fixtures.....	5,000.00
Treasury Stock.....	10,000.00
Due on Capital Stock Subscriptions.....	65,000.00
	\$391,000.00

Liabilities

Current Accounts.....	\$13,800.00
Dividends Payable to Stockholders.....	7,200.00
Capital Stock—Authorized Issue.....	250,000.00
Surplus	120,000.00
	\$391,000.00

You ascertain the following facts:

That the operating profit on sales amounted to \$12,400, being $7\frac{1}{2}\%$ on total sales.

That 10% has been written off on Organization Expense and charged to Surplus.

That unpaid capital stock subscriptions include premiums amounting to \$15,000; that the original subscriptions against which balances remain unpaid amounted to \$65,000 (par value); and that capital stock certificates are not issued until fully paid for.

That premiums have been paid, on capital stock certificates issued, in the amount of \$13,800.

That "Brands, Trade-Marks, and Copyrights" acquired were bought for \$10,000 cash.

That a dividend of 3% has been declared on capital stock.

That "Treasury Stock" has not been issued.

From the data submitted, you are asked to criticize the published balance sheet; prepare an adjusted balance sheet and write a brief report thereon for the information of a stockholder. (Wisconsin, 1915.)

Answer to Question IV

Mr. Stockholder,
Milwaukee, Wisconsin.

Dear Sir:

In accordance with your instructions, I have examined the published balance sheet of the Merchants' Co-operative Manufacturing

Company, and have also taken into consideration the additional data submitted.

The published balance sheet shows a balance to the credit of Surplus account amounting to \$120,000, which amount is apparently derived from the following sources:

	Debits	Credits
Net Profits on Sales:		
On Settled Accounts \$105,333.33, 7½%.....		\$7,900.00
On Unpaid Accounts 60,000.00, 7½%.....		4,500.00
Total Sales.... \$165,333.33		
Premiums on Capital Stock Sales:		
Premiums Paid.....		13,800.00
Premiums Unpaid.....		15,000.00
Brands, Trade-Marks, and Copyrights, arbitrary appreciation above actual cost.....		90,000.00
Organization Expenses written off.....	\$4,000.00	
Dividend Declared (3%).....	7,200.00	
Balance as per published Balance Sheet.....	120,000.00	
	<u>\$131,200.00</u>	<u>\$131,200.00</u>

An adjusted balance sheet of the company, stated more clearly, should be as follows:

Assets

Brands, Trade-Marks, and Copyrights.....	\$ 10,000.00		
Furniture and Fixtures.....	5,000.00		
Customers' Accounts—Due from Dealers.....	60,000.00		
Inventories	100,000.00		
Cash at Banks and in Hand.....	15,000.00		
Deferred Charges to Operations:			
Organization Expenses.....	36,000.00		
Due on Capital Stock Subscriptions:			
Shares at par value.....	\$ 50,000.00		
Premiums	15,000.00	65,000.00	<u>\$291,000.00</u>

Liabilities

Capital Stock:

Authorized Issue.....	\$250,000.00	
Less Unissued Stock.....	10,000.00	<u>\$240,000.00</u>

Made up of:

Issued and Outstanding.....	\$175,000.00		
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"Held in Trust" pending completion of payments:			
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Instalments paid.....	\$15,000.00		
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Balance due per contra.....	50,000.00	65,000.00	
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Total.....		\$240,000.00	
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Current Accounts Payable.....		13,800.00	
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Dividend Declared.....		7,200.00	
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Deferred Income:

Unearned Profits on Outstanding			
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Accounts Receivable Due from			
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Dealers (estimated).....	\$4,500.00		
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Premiums on Capital Stock Sub-			
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scriptions Not Yet Paid.....	15,000.00	19,500.00	\$280,500.00
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Surplus Account:

Profit for year as stated.....	\$12,400.00		
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Less Deferred Income (as above).....	4,500.00		
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		\$7,900.00	
--	--	------------	--

Less Proportion of Organization Expenses..		4,000.00	
--	--	----------	--

Balance—Net Profit from Operations.....	\$3,900.00		
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Add Premiums Paid on Capital Stock Sub-			
---	--	--	--

scriptions		13,800.00	
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		\$17,700.00	
--	--	-------------	--

Less Dividend Declared.....		7,200.00	
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Adjusted Balance.....			10,500.00
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			<u>\$291,000.00</u>
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The amount of \$90,000 by which Brands, Trade-Marks, and Copyrights were appreciated has been excluded, and only the actual cost of \$10,000 is shown. It is probable that this arbitrary appreciation was made for the purpose of increasing the balance to the credit of Surplus. It would seem impossible for this large appreciation to be well founded in one year of business operations.

Goods are shipped to dealers on terms that establish merchandise in their hands as "Consignments." Such goods should be valued "at

cost," as being stock on hand, and no profits should be taken credit for until the accounts are paid. The unearned profits are shown in the adjusted balance sheet as deferred income and have been calculated as being $7\frac{1}{2}\%$ of the sales (\$60,000 not yet paid for).

No depreciation charge is mentioned as affecting Furniture and Fixtures. Consideration should be given to this item.

In its Surplus account, the company has taken credit for premiums collected and premiums uncollected on capital stock subscriptions. Premiums not yet paid for are shown in the adjusted balance sheet as deferred income; and they should not be considered as earnings until actually received.

From the condensed statement of Surplus account shown in the adjusted balance sheet, it will be noted that the profits from operations amounted to only..... \$3,900.00
while the dividend declared amounted to..... 7,200.00

a difference of..... \$3,300.00

In order to have sufficient earnings on which to declare the dividend, it has been necessary to use the premiums paid on capital stock subscriptions..... 13,800.00

The remaining balance of.....\$10,500.00
is the amount to the credit of Surplus account in the adjusted balance sheet.

Yours truly,

....., C. P. A.

Question V

The office of a firm of traders, doing business in San Francisco, was destroyed by an earthquake. The books of account, which had been fully posted, were badly damaged. The following ledger accounts were found to be legible: Purchases, net, \$69,000; Discounts Lost, \$640; Discounts Gained, \$3,450; Sales, \$54,000; Bills Receivable, \$33,000.

Inquiry at the bank disclosed a balance on deposit, \$129,000. Bills receivable amounting to \$45,000 had been discounted at the bank. An audit of the checks paid by the bank showed that \$99,000 had been paid creditors (including \$60,000 notes payable).

A balance sheet prepared at the last closing of the books was produced, containing the following items: cash, \$60,000; accounts receivable, \$126,000; loans receivable, \$24,000; real estate, \$90,000; notes receivable, \$78,000; capital, \$318,000; notes payable, \$60,000.)

Prepare a trial balance supplying the missing accounts. (New York, June, 1915.)

Answer**CASH**

Balance	\$60,000.00	Notes Payable.....	\$60,000.00
Notes Receivable Dis-		Creditors	39,000.00
counted	45,000.00	Balance carried down..	129,000.00 ✓
Customers	123,000.00		
	<u>\$228,000.00</u>		<u>\$228,000.00</u>
Balance brought down..	\$129,000.00		

CUSTOMERS

Balance	\$126,000.00	Discounts Lost.....	\$640.00
Sales	54,000.00	Cash	123,000.00
		Balance carried down..	56,360.00
	<u>\$180,000.00</u>		<u>\$180,000.00</u>
Balance brought down..	\$56,360.00		

CREDITORS

Discounts Gained.....	\$3,450.00	Purchases	\$69,000.00
Cash	39,000.00		
Balance carried down..	26,550.00		
	<u>\$69,000.00</u>		<u>\$69,000.00</u>
		Balance brought down..	\$26,550.00

NOTES RECEIVABLE

Balance	\$78,000.00	Cash, Notes Receivable	
		Discounted	\$45,000.00
		Balance carried down..	33,000.00
	<u>\$78,000.00</u>		<u>\$78,000.00</u>
Balance brought down..	\$33,000.00		

NOTES PAYABLE

Cash	\$60,000.00	Balance	\$60,000.00
	<u>\$60,000.00</u>		<u>\$60,000.00</u>

SAN FRANCISCO TRADERS

TRIAL BALANCE AT JUNE 30, 1915

Real Estate.....	\$90,000.00		
Cash	129,000.00		
Notes Receivable.....	33,000.00		
Loans Receivable.....	24,000.00		
Accounts Receivable.....	56,360.00		
Accounts Payable.....		\$26,550.00	
Capital		318,000.00	
Sales		54,000.00	
Purchases	69,000.00		
Discounts Gained.....		3,450.00	
Discounts Lost.....	640.00		
	<u>\$402,000.00</u>	<u>\$402,000.00</u>	

Question VI

As to balance sheet:

- (a) Define a balance sheet, and state wherein it differs from a statement of assets and liabilities.

- (b) Wherein does a balance sheet prepared in England differ from one prepared in this country?
- (c) Construct a pro forma balance sheet for a lumber company owning lands, conducting logging operations, and operating a sawmill and commissary. A part of its capital stock has not been issued; its lands are covered by mortgages and it has discounted some bills receivable. No figures need be given, but arrange the assets and liabilities as they should appear, giving reasons for the order in which you place them. (Florida, 1915.)

Answer

(a) A balance sheet is a statement of the assets, liabilities, and capital (including surplus) or deficit balance of an undertaking as at a given date. A statement of assets and liabilities would contain the same elements as a balance sheet, but an attempt has been made to restrict the use of the term "balance sheet" to such a statement made up from facts recorded in double-entry books of account, and to use the term "statement of assets and liabilities" in connection with a statement of such facts made up from sources other than double-entry books of account.

(b) A balance sheet prepared in England is arranged with the assets on the right side and the liabilities on the left side of the statement. This arrangement is exactly opposite to the form used in the United States.

(c) The following statement is arranged according to the ease with which the items can be realized or must be liquidated. The account headings and notes are typical of a lumber company such as is outlined. More detail concerning commissary scrip and pay-rolls might be given but it is not usual in general statements.

BLANK LUMBER COMPANY

BALANCE SHEET

AS OF DECEMBER 31, 1915

<i>Assets</i>		<i>Liabilities and Capital</i>	
Cash	\$.....	Accrued Pay-Rolls.....	\$.....
Accounts Receivable....	.....	Accounts Payable.....	.....
Notes Receivable.....	.....	Loans Payable.....	.....
Logs and Manufactured		Accrued License Fees	
Lumber .....	.....	Deposits on Orders....	.....
Advances on Logging		Mortgage on Land....	.....
Operations .....	.....	Capital Stock:	
Timber Lands.....	.....	Authorized...\$.....	
Mill Plant and Equip-		Less Unissued	
ment .....	.....		
Commissary Scrip.....	.....	Issued .....	.....
Prepaid Taxes.....	.....	Surplus .....	.....
Total Assets.....	\$.....	Total Liabilities and	
		Capital.....	\$.....

There is a contingent liability for Notes Receivable Discounted, not yet matured, amounting to \$.....

Loans Payable amounting to \$..... are secured by pledge of the stock of logs and lumber.

AUDIT METHODS

Question I

Prepare an audit program for any medium-sized concern, arranged in the order that you think the work should be performed, specifying the nature of the business. (Massachusetts, 1915.)

Answer

Take for example a woolen mill:

Count office cash; verify bank balances.

Examine notes receivable on hand.

Draw off trial balance of general books, or check one already drawn.

Check detailed lists of balances of sales ledger, and of purchase ledger if one is carried.

Check extensions and footings of inventories.

Prove outstanding capital stock from the stock ledger and the stubs of the certificate book.

Check all footings of ledgers, cash book, invoice record or voucher register, sales record, note books, journal, and any other books from which postings are made; and check all postings or transfers from one of these books to another and to the general ledger.

Examine vouchers for all credits to cash or to personal accounts.

See that proper provision is made for depreciation and that prepaid and accrued items are taken into account and correctly figured.

Of course, the work may require many days' labor; and in practice the auditor may often dispense with much of the detail of the footings and postings, placing such reliance on internal checks as in his judgment is safe, and making tests of parts of the work selected with due discretion.

Question II

Describe how an audit of a set of books can be conducted without the knowledge or suspicion of the bookkeeper. (New York, June, 1915.)

Answer

The audit would have to be conducted during the absence or vacation of the bookkeeper, and be done without making the usual check marks on any of the books. This can be

accomplished by summarizing the transactions in the books of original entry on working sheets according to ledger accounts and verifying these totals with an analysis made of the ledger accounts. The analysis of the ledger might be arranged to correspond with the subsidiary books, by adopting the method used in blocking a ledger or by using the so-called articulation method.

Question III

Would you, or would you not, be satisfied with a list run off on an adding machine by some one connected with the institution under examination after you had compared the amount of each item with the listed figures? Give your reason. (Delaware, 1915.)

Answer

The auditor should not be satisfied with such a list prepared by a company employee, because he has no certainty as to the correctness of the *total*. It is an easy matter to manipulate an adding machine so as to include all the required items and nevertheless show a wrong total. If the auditor desires to use an adding machine he should make his own run-off and thus convince himself that both items and total are correct.

Question IV

- (a) What are the working papers of an audit?
- (b) How should they be arranged and marked? (Massachusetts, 1915.)

Answer

- (a) Any and all records made by the auditor for his own use, to be kept by him, as distinguished from the report,

which is given to the client. They include all sorts of memoranda according to circumstances.

(b) They should be filed in folders for individual cases, chronologically within the folders, and the folders filed either in alphabetical or numerical order.

AUDIT OF SECURITIES

Question I

In examining securities, what data should be recorded to protect the auditor? What is to be apprehended? (Ohio, 1915.)

Answer

In examining bonds it is necessary to take notes of the name of the issuing company, the date of the individual bond, the serial number, also the amount, the number, and date of the last coupon attached. It is also important to state the name of the company owning the bond or the name of the person to whom the bond has been issued and the indorsements. Book values should also be stated.

Stock certificates should be examined, and the same points as given above, with the exception of coupons, should be noted. In addition thereto, the par value of the shares and the number of shares in each certificate should be noted. Certificates out for transfer should be verified by correspondence.

The data recorded should be compared with the company's investment record to prevent substitution and to apprehend manipulation or temporary conversion which may have been corrected just prior to the auditor's visit. A prime object of the audit is to see that the securities as well as

all of the interest-bearing coupons are in the actual possession of the company; the latter should be attached to the bonds. Market values should also be compared.

Question II ✓

In auditing a trust company's accounts, you find that the company is cotrustee for a number of estates. The securities are locked in a safe deposit box that cannot be opened without the assistance of the absent trustee, who will be away for several months. What precautions should be taken to safeguard the integrity of your audit? (New York, June, 1915.)

Answer

Pending the return of the absent trustee, the safe deposit box should be sealed and the auditor should enumerate in his report what securities the box should contain. He should also state his inability to gain access to the contents of the box to inspect and verify the securities.

AUDITOR'S DUTIES AND RESPONSIBILITIES**Question I**

Briefly outline the duties of an auditor and his responsibilities. (South Carolina, 1915.)

Question II

Describe the duties and responsibilities of an auditor, stating what special qualifications he must possess in addition to his knowledge of, and practical experience in, accounting. (Louisiana, 1915.)

Question III

State briefly:

- (a) What are the duties of an auditor?
- (b) What qualifications should he possess? (Maryland, December, 1915.)

Answer to Questions I – III

"1. Anyone who holds himself out as skilled in a profession is charged with a higher degree of responsibility than one who is inexperienced and who does not seek professional work. Acting in a professional capacity, an auditor must do more than ascertain the mere arithmetical accuracy of the accounts. If the accounts do not represent the true financial position of the undertaking under examination, and if that fact is apparent or can reasonably be deduced from the face of the accounts themselves, then the auditor is under a legal obligation to discover and disclose the true state of affairs.

"2. The auditor, however, is not an insurer unless he assumes such a position. If he uses reasonable care—the care of an ordinary skilful auditor, under the circumstances of the case—no legal responsibility is incurred by him.

"3. Reasonable care has been stated by the courts to depend upon the circumstances of each case. Where there is no reasonable ground for suspicion of fraud, it is not necessary to take as many precautions as are requisite where the auditor is led to believe that irregularities exist.

"4. Ordinarily what is known as a 'test and scrutiny' audit is sufficient, but in every case there must be a careful survey of the assets, the liabilities, the income, and the expenses, in order that the auditor may satisfy himself that the assets and the income are accounted for, and that the liabilities and expenses are properly supported. The auditor

need not verify every item, but he must not omit any part of an audit which the custom of the profession decrees should be covered.

"5. The experience of other practitioners and access to recognized authorities on the subject being available, a defense of ignorance as to what is required in an audit will not save an auditor from responsibility for failure to follow settled rules of practice.

"6. The general rule of the common law, that all men are considered honest until proved dishonest, may be observed by an auditor with respect to the staff of the client; but he is charged with an exceptional degree of diligence in recognizing indications of dishonesty on the part of those who occupy responsible positions.

"7. An auditor's relation to his client is in the highest degree confidential, and he has no legal right to communicate with third parties (debtors or creditors) unless he secures permission to do so. If his position as auditor becomes incompatible with honesty, he may withdraw at any time, but he is not at liberty to disclose to outsiders the cause of his withdrawal.

"8. In communicating with his client, however, the auditor is bound to disclose information, of whatever nature it may be, which is of value to the client, and any suppression of material facts is at his own risk.

"9. In the event of loss through an auditor's negligence the client may recover damages against him. The measure of damages is the amount which the client or other interested party has lost as a legal consequence of the auditor's failure to perform his duty properly."*

The first important qualification of the professional auditor is a thorough knowledge of practical accounting,

*"Auditing, Theory and Practice," by Montgomery, page 7.

which, of course, embraces a complete mastery of bookkeeping. The auditor should be familiar with all of the systems of accounting in general use and with the various details of office and factory methods.

Outside of a knowledge of bookkeeping and accounting, the auditor should have an intelligent grasp on general business practices and a wide experience in special lines of industry, not only regarding the fundamental principles but also the specific peculiarities of many diversified kinds of business.

A fair knowledge of commercial law is essential.

In addition to the broadest kind of business training, the auditor's preliminary education cannot be too extensive.

He must be absolutely honest; he must possess a natural habit of fair dealing and the faculty of inspiring in others a trust in his integrity.

General faculties and traits which are of the utmost importance are intelligence, a quick grasp of situations and detail, a well-controlled practical imagination, and an analytical ability of a high degree. He should have dignity, an ability to meet people and converse easily, and must be a gentleman in every sense of the word.

Question IV

In making up a profit and loss statement at the end of a fiscal year, are you stating a fact or an opinion? Give reasons. (Delaware, 1915.)

Question V

What is the significance of an auditor's certificate of the profits of a business about to be sold? To what extent is an auditor responsible, morally and legally, for his certificate? (Maryland, February, 1915.)

Answer to Questions IV and V

The auditor in submitting a profit and loss statement is giving it as his opinion that the statement is correct, but his opinion is based on the results of investigation or audit and on the figures from the books of account which he has reason to believe are true.

It may be concluded, therefore, that an auditor's statement is merely an expression of professional opinion and, where a misstatement of facts has been made, the auditor is not responsible as long as he has exercised all reasonable care in the discharging of his duty.

An auditor is morally responsible if he does not properly perform his duties, in a manner which shall conform to the best practices of the profession.

An auditor is legally responsible for the loss caused by his negligence if he fails to use reasonable care or neglects his duty.

A sufficient reason for the above answers is contained in the reports of legal cases between the auditor and his client. These reports invariably state that the auditor is not responsible unless he has failed to use reasonable care and diligence in the discharge of his duties.

The following case is authority for the above answer:

"... I come now to the real question in this controversy, and that is whether the appellants have been guilty of any breach of duty to the company. To decide this question it is necessary to consider (1) what their duty was; (2) how they performed it, and in what respects (if any) they failed to perform it. . . . I protest against the notion that an auditor is bound to be suspicious, as distinguished from being reasonably careful. To substitute the one expression for the other may easily lead to serious error. I pass now to consider the complaint made against the auditors in this particular case. The complaint is that they failed to detect certain frauds. There is no charge of dishonesty on the part of the auditors. They did not certify or pass anything which they did not honestly believe to be true. It is said, however, that they were culpably careless. The circumstances are

as follows: For several years frauds were committed by the manager, who, in order to bolster up the company and make it appear flourishing when it was the reverse, deliberately exaggerated both the quantities and values of the cotton and yarn in the company's mills. He did this at the ends of the years 1890, 1891, 1892 and 1893. There was no book or account (except the stock journal, to which I will refer presently) showing the quantity or value of the cotton or yarn in the mill at any one time. It would not be easy to keep such a book. Nor is it wanted for ordinary purposes. There is considerable waste (twenty or twenty-five per cent on the average) in the manufacture of yarn from cotton, and the market prices of both cotton and yarn are subject to great fluctuations. The balance sheets of each year contained on the assets side entries of the values of the stock-in-trade at the end of the year, and those entries were stated to be 'as per manager's certificate.'

"There were also in the balance sheets entries on the opposite side of the values of the stock-in-trade at the beginning of the year. The quantities did not appear in either case. The auditors took the entry of the stock-in-trade at the beginning of the year from the last preceding balance sheet, and they took the values of the stock-in-trade at the end of the year from the stock journal. The book contained a series of accounts under various heads purporting to show the quantities and values of the company's stock-in-trade at the end of each year, and a summary of all the accounts, showing the total value of such stock-in-trade. The summary was signed by the manager, and the value, as shown by it, was adopted by the auditors and was inserted as an asset in the balance sheet, but 'as per manager's certificate.' The summary always corresponded with the accounts summarized. The auditors did not profess to guarantee the correctness of this item. They assumed no responsibility for it. They took the item from the manager, and the entry in the balance sheet showed that they did so. I confess I cannot see that their omission to check his returns was a breach of their duty to the company.

"It is no part of an auditor's duty to take stock. No one contends that it is. He must rely on other people for details of the stock-in-trade in hand. In the case of a cotton mill, he must rely on some skilled person for the materials necessary to enable him to enter the stock-in-trade at its proper value in the balance sheet. In this case the auditors relied on the manager. He was a man of high character and of unquestioned competence. He was trusted by every one who knew him. The learned judge has held that the directors are not to be blamed for trusting him. The auditors had no suspicion that he was not to be trusted to give accurate information as to the stock-in-trade in hand, and they trusted him accordingly in that matter.

"But it is said they ought not to have done so, and for this reason: The stock journal showed the quantities—that is, the weight in pounds—of the cotton and yarn at the end of each year. Other books showed the quantities of cotton bought during the year and the quantities of yarn sold during the year. If these books had been compared by the auditors they would have found that the quantity of cotton and yarn in hand at the end of the year ought to be much less than the quantity shown in the stock journal, and so much less that the value of the cotton and yarn entered in the stock journal could not be right, or, at all events, was so abnormally large as to excite suspicion and demand further inquiry. This is the view taken by the learned judge. But, although it is no doubt true that such a process might have been gone through, and that, if gone through, the fraud would have been discovered, can it be truly said that the auditors were wanting in reasonable care in not thinking it necessary to test the managing director's returns? I cannot bring myself to think they were, nor do I think that any jury of business men would take a different view.

"It is not sufficient to say that the frauds must have been detected if the entries in the books had been put together in a way which never occurred to anyone before suspicion was aroused. The question is whether, no suspicion of anything wrong being entertained, there was a want of reasonable care on the part of the auditors in relying on the returns made by a competent and trusted expert relating to the matters on which information from such a person was essential. I cannot think there was. The manager had no apparent conflict between his interest and his duty. His position was not similar to that of a cashier who has to account for the cash which he receives, and whose own account of his receipts and payments could not be reasonably taken by an auditor without further inquiry.

"It is the duty of an auditor to bring to bear on the work he has to perform that skill, care, and caution which a reasonably competent, careful, and cautious auditor would use. What is reasonable skill, care, and caution must depend on the particular circumstances of each case. An auditor is not bound to be a detective or, as was said, to approach his work with suspicion, or with a foregone conclusion that there is something wrong. He is a watchdog, but not a bloodhound. He is justified in believing tried servants of the company in whom confidence is placed by the company. He is entitled to assume that they are honest and to rely upon their representations, provided he takes reasonable care. If there is anything calculated to excite suspicion, he should probe it to the bottom, but in the absence of anything of that kind he is only bound to be reasonably cautious and careful. . . . The duties of auditors must not be rendered too onerous. Their work is responsible and laborious, and the remuneration moderate.

I should be sorry to see the liability of auditors extend any further than *In re* The London and General Bank. Indeed, I assented to that decision only on account of the inconsistency of the statement made to the directors with the balance sheet certified by the auditors and presented to the shareholders. This satisfied my mind that the auditors deliberately concealed that from the shareholders which they had communicated to the directors. It would be difficult to say this was not a breach of duty. Auditors must not be made liable for not tracking out ingenious and carefully laid schemes of fraud when there is nothing to arouse their suspicion, and when those frauds are perpetrated by tried servants of the company and are undetected for years by the directors. So to hold would make the position of an auditor intolerable." (*In re* Kingston Cotton Mill Co., 2 Ch. Div. 279 (Court of Appeals, May 19, 1896.)

However, in connection with the above decision it may be well to quote the opinion of R. H. Montgomery who states that "most prominent American accountants would now probably agree that a failure to discover the true state of affairs, when the means for doing so were available, would be inexcusable."*



Question VI

If employed by the officers of a corporation to make an audit, would you make any difference in your plans and in your report if you knew whether the audit was to be presented to a prospective purchaser of the stock, to a prospective purchaser of bonds, to the bank as a basis for the purpose of securing a loan, or to the stockholders at their regular annual meeting? If so, state the differences. (Michigan, June, 1915.)



Answer

While there should be no material difference in the audit in any of the cases cited, the auditor should have in

*Montgomery's "Auditing Theory and Practice," page 90.

mind the use that will be made of the information which he will gather, for he may occasionally be able to make his investigation cover more fully some special points that will be of particular use to his client.

The accountant's report should always be written with the use that the client desires to make of it in mind, for the point of view may differ materially. For instance, the prospective purchaser of stock would be primarily interested in the earnings or dividends of the corporation and of its value as a going concern. The prospective purchaser of bonds would be principally interested in the value of the property mortgaged and the ability of the company to maintain the interest payable during the life of the bonds and to retire them at maturity. The banker, while interested incidentally in the earning capacity of the corporation, would be primarily desirous of knowing the probable ability of the corporation to repay the loan at maturity. The stockholders' chief interest is usually in the earning capacity of the corporation and of the conduct of the business in the past by the directorate chosen by them.



Question VII

Is it within the scope of an auditor's duty to examine the signatures of the checks drawn by a firm or corporation under audit? Is it necessary to scrutinize the indorsements? If so, why? If not, why not? (New York, January, 1915.)



Answer

It is not within the scope of an auditor's duty to examine the signatures of checks, as according to law a bank is supposed to know its customers' signatures and, therefore, if a bank pays out on a forged signature, the bank is the loser.

The customer being safeguarded in this way, the auditor need not examine the signature.

It is, however, necessary to scrutinize the indorsements in order to see that the name indorsed corresponds to the name on the face of the check. It is important for the auditor to do this, because if the check is paid to some other person than the payee, the company is still liable to the payee for the amount.

AUDITS, CLASSES OF

Question I

State four different classes of audits and give briefly the scope of each. (Minnesota, 1915.)

Question II

What is meant by:

- (a) A balance sheet audit
- (b) A continuous audit
- (c) A completed audit
- (d) A detailed audit (Ohio, 1915.)

Answer to Questions I and II

(a) A balance sheet audit is an audit which has as its purpose the production of a correct balance sheet at a certain date. It includes the verification of stated assets and of stated liabilities, the discovery of unstated assets and of unstated liabilities, and the auditor must also ascertain if all liabilities have been incurred with proper authority.

(b) A continuous audit applies to the supervision by an auditor who examines transactions as they occur or at regular intervals (as once a month) rather than at the end

of longer periods. The dividing line between a balance sheet audit and a continuous audit is not very distinct and the latter term is not often used without an accompanying explanation.

(c) A completed audit is also a vague term, usually taken to mean the audit of a completed period and the preparation of a final report and statements.

(d) A detailed audit is a completed balance sheet which in addition includes the verification of stated earnings and expenses, and the ascertainment of unstated profits and losses.

AVERAGE DUE DATE

Question I

A in London in current account with B of New York, engages an accountant to prepare a statement, to be mailed to B from the following data:

Debits:

1914

May 12..... £750

May 30..... 117

June 12..... 340

July 1..... 150

Total Debits.....	£1,357
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Credits:

1914

June 10..... £500

June 30..... 300

Total Credits.....	800
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Balance	£557
---------------	------

Answer

B—NEW YORK

Question II

A bought goods of B as follows:

May 4, 30 days.....	\$800.00
May 30, 2 months.....	500.00
June 8.....	400.00
June 20.....	300.00

July 1 A gave B a note for sixty days drawing interest at 6% and dated at the average due date. Write the note. (Michigan, June, 1915.)

Answer

Focal date, June 3.

Date	Term	Due Date	Amount	Interest at 6% from Focal Date
May 4	30 days	June 3	\$800.00	
May 30	2 mths	July 30	500.00	4.75
June 8		June 8	400.00	.33
June 20		June 20	300.00	.85
			<u>\$2,000.00</u>	<u>\$5.93</u>

Interest on \$2,000 for 1 day at 6% = \$.33

$$\frac{5.93}{.33} = 18$$

Therefore, the average due date
is 18 days from June 3, or June 21.

\$2,000.00 June 21, 1915.
Sixty days.....after date..*I*..promise to pay to
the order of *B*.....
Two Thousand and no/100.....Dollars
with interest at 6%.

A

BALANCE SHEETS

Question I ✓

Prepare a specimen form of balance sheet for a \$5,000,-000 manufacturing or public service corporation, which will clearly set forth the financial condition of the concern. (Massachusetts, 1915.)

Answer

The following is submitted as a condensed form of balance sheet for a manufacturing corporation. The form of the balance sheet of a public service corporation would be very different. The regulations of the various authorities almost invariably prescribe for such companies the form showing assets in the order of fixed assets, investments, current assets, and the liabilities in the order of capital stock, funded debt, current liabilities, reserves, and surplus. However, the form below seems preferable, from numerous considerations, in cases where the other form is not prescribed.

Assets

Cash	\$.....	
Notes Receivable.....	.....	
Accounts Receivable.....	\$.....	
Less Reserve for Doubtful Ac-		
counts		\$.....
Inventories:		
Finished Goods.....	\$.....	
In Process.....		

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Materials and Supplies.....		
Total Current Assets.....		\$.....
Investments		
Land	\$.....	
Buildings	\$.....	
Less Reserve for Depreciation....	.....	.....
Machinery and Equipment.....	\$.....	
Less Reserve for Depreciation....	.....	.....
Deferred Charges (Interest, Insurance, etc.).....		.....
Good-Will.....		.....
		\$.....

Liabilities and Net Worth

Accounts Payable.....	\$.....	
Notes Payable.....	.....	
Accrued Items (Wages, Interest, Taxes, etc.)..	.....	\$.....
Bonds Payable.....		.....
Total Liabilities.....		\$.....
Capital Stock, Authorized and Issued:		
Preferred	\$.....	
Common .....	.....	
Total	\$.....	
Special Reserves (in detail).....	.....	
Surplus .....	.....	
Net Worth.....		.....
		\$.....

BALANCE SHEETS, COMPARATIVE

Question I ✓

The balance sheet of a joint-stock company, January 1, 1913, shows the following state of affairs:

Liabilities

Capital Stock.....	\$200,000.00
Creditors, Open Accounts.....	16,000.00
Bills Payable.....	30,000.00
Profit and Loss Account.....	30,500.00
	\$276,500.00

Assets

Real Estate.....	\$50,000.00
Plant and Machinery.....	85,000.00
Horses and Wagons.....	15,000.00
Patents and Good-Will.....	20,500.00
Inventory	49,000.00
Accounts Receivable.....	35,000.00
Cash in Bank.....	22,000.00
	\$276,500.00

A year later, January 1, 1914, after an audit of the books of accounts, the balance sheet stands as follows:

Liabilities

Capital Stock.....	\$200,000.00
Creditors, Open Accounts.....	17,000.00
Mortgage	25,000.00
Profit and Loss Account:	
Balance last year.....	\$30,500.00
Profit this year.....	23,400.00
	\$295,900.00

Assets

Real Estate.....		\$52,000.00
Plant and Machinery:		
Balance, January 1, 1913.....	\$85,000.00	
Less Depreciation.....	8,500.00	76,500.00
Horses and Wagons:		
Balance, January 1, 1913.....	\$15,000.00	
Less Depreciation.....	2,250.00	12,750.00
Patents and Good-Will.....		20,500.00
Inventory		65,000.00
Accounts Receivable.....		33,000.00
Agency Investment.....		15,000.00
Cash in Bank.....		21,150.00
		<u>\$295,900.00</u>

From the foregoing, it will be seen that for the year a net profit of \$23,400 has been earned, while the accounts receivable are smaller, and the cash balance on hand is less than at the beginning of the year, though no dividend has in the meantime been paid. Prepare account showing what has become of the profits earned. (Maine, 1915.)

Answer to Question I

This problem entails some reasoning on the part of the candidate to prepare the required account in a form which would be something more than an arithmetical solution. No doubt the stockholders of the company would want something more than a bare increase and decrease statement, the summary of which would read as follows:

Increase in Assets.....	\$33,000.00
Decrease in Assets.....	13,600.00
Net Increase in Assets.....	\$19,400.00

Decrease in Liabilities.....	\$30,000.00	
Increase in Liabilities.....	26,000.00	
Net Decrease in Liabilities.....		4,000.00
Total Net Increase in Assets and Net Decrease in Liabilities		\$23,400.00

as per balance sheet of January 1, 1914.

A joint-stock company in this country is a rare type of business organization in this age of corporations. In the absence of statute, the liability of the members or the shareholders of such a company would be the same as those of partners.

It is necessary to show what has become of the profits earned. The question is mandatory on this point, but it is also essential to find out what happened to the resources existing at January 1, 1913, and their application, and then we will be better prepared to show what happened to their increases through profits during the year under review.

An analytical statement in account form for easier comprehension would read as follows:

Resources Acquired Through:

**(a) Consumption of Current Assets
existing at January 1, 1913:**

Cash	\$850.00	
Accounts Receivable.....	2,000.00	
Total.....		\$2,850.00

(b) Increase of Liabilities:

Current Liabilities, Accounts Payable....	\$1,000.00	
Creation of New Capital Liability, Mortgage Payable.....	25,000.00	
Total.....		26,000.00
Total Decreases and Resources.....		\$28,850.00

BALANCE SHEETS, COMPARATIVE

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(c) Profits of period as shown.....	\$23,400.00	
Add Appropriations for		
Reserve Purposes:		
10% Depreciation of Plant and		
Machinery	\$8,500.00	
15% Depreciation of Horses		
and Wagons.....	2,250.00	10,750.00
Total Profits of period.....		34,150.00
Total Reserves to be accounted for.....		\$63,000.00

Application of Said Reserves:

(a) Increase in Trading Assets:		
Merchandise Inventory.....		\$16,000.00
(b) Increase in Capital Assets:		
Real Estate.....	\$2,000.00	
Agency Investments.....	15,000.00	
Total		17,000.00
Total Increases in Resources.....		\$33,000.00
(c) Decrease of Liabilities existing at January 1, 1913:		
Bills Payable, liquidated in full.....		30,000.00
Total Resources applied.....		\$63,000.00

The account required by the question follows:

THE BLANK JOINT-

ANALYTICAL ACCOUNT SHOWING THE
EARNED DURING

<i>Assets</i>	January 1, January 1,		Decrease	
	1913	1914	Increase	
Cash in Bank.....	\$22,000.00	\$21,150.00	Decrease	\$850.00
Accounts Receivable..	35,000.00	33,000.00	"	2,000.00
Merchandise Inventory	49,000.00	65,000.00	.....	
Agency Investments...		15,000.00	.....	
Plant and Machinery..	85,000.00	76,500.00	.....	
Horses and Wagons..	15,000.00	12,750.00	.....	
Real Estate.....	50,000.00	52,000.00	.....	
Patents and Good-Will	20,500.00	20,500.00	.....	
	<u>\$276,500.00</u>	<u>\$295,900.00</u>		<u>\$2,850.00</u>
<i>Liabilities</i>				
Bills Payable.....	\$30,000.00	.....	.....	
Creditors, Open Ac-				
counts	16,000.00	\$17,000.00	Increase	1,000.00
Mortgage		25,000.00	"	25,000.00
Capital Stock.....	200,000.00	200,000.00	.....	
Undivided Profit.....	30,500.00	53,900.00	.....	
	<u>\$276,500.00</u>	<u>\$295,900.00</u>		<u>\$28,850.00</u>

STOCK COMPANY

APPLICATION OF THE NET PROFITS
THE YEAR 1913

of Assets and of Liabilities	Increase of Assets and Decrease of Liabilities
.....	Increase \$16,000.00
.....	Net Investments made... 15,000.00
10% Depr. Res. set aside \$8,500.00	
15% " " " " 2,250.00	
.....	Additional Betterments. 2,000.00
<u>\$10,750.00</u>	<u>\$33,000.00</u>
.....	Liquidated in full..... 30,000.00
Net Profit carried to	
Undiv. Profit Acct.... 23,400.00	
<u>\$34,150.00</u>	
28,850.00	
<u>\$63,000.00</u>	<u>\$63,000.00</u>

Question II

The following is a comparative balance sheet at December 31, 1910, and at December 31, 1911, presented to the board of directors of the Western Company at its meeting January 5, 1912.

Assets

	December 31, 1910	December 31, 1911
Land	\$20,000.00	\$25,000.00
Buildings	45,000.00	45,000.00
Machinery and Tools.....	86,000.00	89,000.00
Horses, Wagons, and Harnesses.....	10,500.00	10,500.00
Patents	6,000.00	6,000.00
Good-Will	25,000.00	25,000.00
Cash	28,300.00	10,300.00
Accounts Receivable.....	29,600.00	26,550.00
Investments and Bonds.....		15,000.00
Inventory—Goods in Process.....	10,800.00	14,690.00
Inventory—Material and Supplies.....	6,750.00	10,300.00
Agency Investments.....		3,680.00
	<u>\$267,950.00</u>	<u>\$281,020.00</u>

Liabilities

Bonds and Mortgage Payable.....		\$20,000.00
Notes Payable.....	\$35,000.00	2,000.00
Accounts Payable.....	16,400.00	19,350.00
Reserves for Depreciation.....	2,500.00	6,750.00
Discount on Bonds.....		1,000.00
Capital Stock:		
Preferred	150,000.00	150,000.00
Common	50,000.00	50,000.00
Surplus	14,050.00	31,920.00
	<u>\$267,950.00</u>	<u>\$281,020.00</u>

The land increase was due to appraisal based on rise of values of factory sites in the immediate vicinity.

Together with the above balance sheet, there was submitted to the board a statement of income and profit and loss showing the profits of the year to have been \$22,120.

The directors state to the auditor that in view of the decrease of cash and accounts receivable, of the absence of dividends, and of the increase of capital liabilities, they are unable to ascertain what has become of the profits of the year.

Prepare a statement to show clearly how the Western Company has applied such resources of the year 1910 as have been lost in 1911, and the resources and profits of the year 1911. (New York, June, 1915.)

Answer to Question II

The following table contains the comparative balance sheet with two additional columns showing increases and decreases:

<i>Assets</i>	December 31, 1910	December 31, 1911	Increases	Decreases
Land	\$20,000.00	\$25,000.00	\$5,000.00	.....
Buildings	45,000.00	45,000.00	.....	.....
Machinery and Tools....	86,000.00	89,000.00	3,000.00	.....
Horses, Wagons, and Harnesses	10,500.00	10,500.00	.....	.....
Patents	6,000.00	6,000.00	.....	.....
Good-Will	25,000.00	25,000.00	.....	.....
Cash	28,300.00	10,300.00	.....	\$18,000.00
Accounts Receivable....	29,600.00	26,550.00	.....	3,050.00
Investments and Bonds..	.....	15,000.00	15,000.00	.....
Inventory—Goods in Process	10,800.00	14,690.00	3,890.00	.....
Inventory—Materials and Supplies	6,750.00	10,300.00	3,550.00	.....
Agency Investments....	.....	3,680.00	3,680.00	.....
	<u>\$267,950.00</u>	<u>\$281,020.00</u>	<u>\$34,120.00</u>	<u>\$21,050.00</u>

<i>Liabilities and Net Worth</i>	December 31, 1910	December 31, 1911	Increases	Decreases
Bonds and Mortgage Payable		\$20,000.00	\$20,000.00	.....
Notes Payable.....	\$35,000.00	2,000.00	.....	\$33,000.00
Accounts Payable.....	16,400.00	19,350.00	2,950.00	.....
Reserves for Depreciation	2,500.00	6,750.00	4,250.00	.....
Discount on Bonds.....	.....	1,000.00	1,000.00	.....
Total Liabilities...	\$53,900.00	\$49,100.00	\$28,200.00	\$33,000.00
Capital Stock—Preferred.	150,000.00	150,000.00	.....	.....
“ “ Common .	50,000.00	50,000.00	.....	.....
Surplus	14,050.00	31,920.00	17,870.00	.....
	<u>\$267,950.00</u>	<u>\$281,020.00</u>	<u>\$46,070.00</u>	<u>\$33,000.00</u>

SUMMARY

Increase in assets.....	\$34,120.00	
Add decrease in liabilities.....	33,000.00	\$67,120.00
	<u> </u>	
Decrease in assets.....	\$21,050.00	
Add increase in liabilities.....	28,200.00	49,250.00
	<u> </u>	
Net increase in surplus.....		\$17,870.00
Deduct special item, increase in book value of land, on appraisal		5,000.00
		<u> </u>
Net profit from ordinary operations.....		<u>\$12,870.00</u>

The statement asked for might be set up as follows :

Funds Available:

Reduction in cash balance.....	\$18,000.00	
“ “ accounts receivable.....	3,050.00	\$21,050.00
	<u> </u>	

BALANCE SHEETS, COMPARATIVE

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Increase in accounts payable.....	\$2,950.00	
" " depreciation reserve.....	4,250.00	
Proceeds of mortgage bonds.....	20,000.00	27,200.00
Net operating profit for year.....		12,870.00
Increase in surplus due to appraisal of land.....		5,000.00
		<u>\$66,120.00</u>

Applied as Follows:

Payment of notes payable.....		\$33,000.00
Machinery bought.....	\$3,000.00	
Investments and bonds, net cost.....	14,000.00	
Agency investments.....	3,680.00	
Increase in inventories.....	7,440.00	28,120.00
Increase in book value of land.....		5,000.00
		<u>\$66,120.00</u>

Although the question is not asked, except perhaps by implication, note that the statement submitted to the board may be reconciled with the above figures as follows:

Profit shown on statement.....	\$22,120.00
Deduct amount reserved for depreciation, evidently not taken into account in preparing said statement.....	4,250.00
Net increase in surplus.....	\$17,870.00
Deduct special item, increase in book value of land, on appraisal	5,000.00
Net profit from ordinary operations.....	<u>\$12,870.00</u>

BALANCE SHEETS, CONSOLIDATED

Question I

Four corporations are controlled by one of the companies through stock ownership. They operate as separate concerns, buying and selling to each other and to outside parties. For preparing a consolidated balance sheet and profit and loss account the following is required for each company:

- (a) First cost of product sold.
- (b) Intercompany profit on sales.
- (c) Stock on hand.

Prepare statement showing above from the following: The combination consists of companies W, X, Y, and Z. Company W purchases raw material and sells \$20,000 to outside parties and \$60,000 cost price to Company X for \$66,000, leaving \$20,000 on hand. Company X spends \$34,000 in manufacture and ships over Company Y's railroad \$70,000 to Company Z and \$20,000 to outside parties. Company Z pays Company X \$77,000 for the goods and pays Company Y freight \$5,000 which cost the latter \$3,500; expends \$18,000 in manufacturing and sells \$70,000 worth of finished product to outside parties, leaving a balance on hand. (Massachusetts, 1915.)

Answer

For the sake of brevity and clearness, let the consolidation of Companies W, X, Y, and Z be designated as "C" and be regarded as a unit. The answers required are not as clearly indicated as they might have been; the solution below is based on the following assumptions:

- (a) That by cost of product sold is meant both the cost shown on the books of the respective companies and also the net cost to C. Company Y "sells" transportation service.

- (b) That intercompany profit on "sales" also applies to freight charges of the railroad company Y; that is, the profit shown on the books of the companies which is not a profit of C.
- (c) That stock on hand is valued both at book cost and at cost to C.

We must also assume that the figures for sales to outside parties, \$20,000 by W, \$20,000 by X, and \$70,000 by Z, are at *cost* price, according to the books of the respective companies.

In the following tables the first column contains book costs and book profits, shown separately; the second, that portion of the amounts in the first arising from intercompany relations; and the third, net costs to C.

	Book Figures	Eliminations	C's Net Costs
Company W:			
Purchases from Outsiders.....	\$100,000.00	.....	\$100,000.00
Sales to Outsiders.....	20,000.00	.....	20,000.00
	<u>\$80,000.00</u>	.....	<u>\$80,000.00</u>
Sales to X.....	60,000.00	.....	60,000.00
	<u>\$20,000.00</u>	.....	<u>\$20,000.00</u>
Stock on Hand.....	<u>\$20,000.00</u>	<u>.....</u>	<u>\$20,000.00</u>
Book Profit, on Sales to X.....	<u>\$6,000.00</u>	<u>\$6,000.00</u>	<u>.....</u>
Company X:			
Purchases from W.....	\$66,000.00	\$6,000.00	\$60,000.00
Manufacturing Labor and Ex- pense	34,000.00	.....	34,000.00
	<u>\$100,000.00</u>	<u>\$6,000.00</u>	<u>\$94,000.00</u>
Sales to Outsiders.....	20,000.00	1,200.00	18,800.00
	<u>\$80,000.00</u>	<u>\$4,800.00</u>	<u>\$75,200.00</u>
Sales to Z.....	70,000.00	4,200.00	65,800.00
	<u>\$10,000.00</u>	<u>\$600.00</u>	<u>\$9,400.00</u>
Stock on Hand.....	<u>\$10,000.00</u>	<u>\$600.00</u>	<u>\$9,400.00</u>

	Book Figures	Eliminations	C's Net Costs
Book Profit, on Sales to Z.....	\$7,000.00	\$7,000.00	.....
Company Y:			
Sales of Freight to Z.....	\$3,500.00	.....	\$3,500.00
Book Profit, on Freight Sold to Z	\$1,500.00	\$1,500.00	.....
Company Z:			
Purchases from X.....	\$77,000.00	{ \$7,000.00 4,200.00 }	\$65,800.00
Freight Purchased from Y.....	5,000.00	1,500.00	3,500.00
Manufacturing Labor and Ex- pense	18,000.00	.....	18,000.00
Cost of Goods Made.....	\$100,000.00	\$12,700.00	\$87,300.00
Sales to Outsiders.....	70,000.00	8,890.00	61,110.00
Stock on Hand.....	\$30,000.00	\$3,810.00	\$26,190.00

The points to be noted in the preparation of the above tables are that 6% of the book cost of the goods made by X is because of W's book profit, and hence is not a cost to C; and similarly that 12.7% of the book cost of the goods made by Z is because of the book profits of W, X, and Y, hence is not a cost to C.

We are now ready to obtain the answers desired, as follows:

(a)

Cost of Product Sold:	Book Cost	Cost to C
W	\$80,000.00	\$80,000.00
X	90,000.00	84,600.00
Y	3,500.00	3,500.00
Z	70,000.00	61,110.00
Total.....	\$243,500.00	\$229,210.00

(b)

	Book Profits	Adjustments Because of Intercompany Relations		Profits to C
		To Deduct	To Add	
Intercompany Profit on Sales:				
On W's sales.....	\$6,000.00	\$6,000.00	.....	.....
On X's sales.....	7,000.00	11,200.00	\$5,400.00	\$1,200.00
On Y's sales.....	1,500.00	1,500.00	.....	.....
On Z's sales.....	.....	.....	8,890.00	8,890.00
Total.....	\$14,500.00	\$18,700.00	\$14,290.00	\$10,090.00

(c)

Stock on Hand:		Book Cost	Cost to C
W		\$20,000.00	\$20,000.00
X		10,000.00	9,400.00
Y .....		.....	.....
Z		30,000.00	26,190.00
Total.....		<u>\$60,000.00</u>	<u>\$55,590.00</u>

It is not to be understood that the total profit of C was only \$10,090, or that C's total stock on hand is \$55,590; Y may have inventories, and no doubt all four companies made profits on the sales to outsiders. But the net result of the above work is to show that in making up a consolidated balance sheet for C, we should deduct \$4,410 from the sum of the book inventories of W, X, Y, and Z; and in making up a consolidated profit and loss account for C, we should deduct \$4,410 from the sum of the book profits (both gross and net) of W, X, Y, and Z.

Question II

A "blank" firm is engaged in the lumber business owning timber lands in fee and licensed, saw mills and other equipment, and 90% of the stock in another lumber corporation.

They instruct an accountant to examine their accounts for the purpose of ascertaining the true financial position. The following is a trial balance from the firm's books December 31, 1914, after closing:

	Dr.	Cr.
Cash	\$ 20,000.00	
Accounts Receivable.....	150,000.00	
Logs and Manufactured Lumber.....	200,000.00	
Advances on Account of Season's Logging Operations	100,000.00	
Investments in Controlled Company, 900 shares (cost).....	99,000.00	
Timber Lands (cost).....	500,000.00	
Mill Plant and Equipment (cost).....	250,000.00	
Loans Payable.....		\$ 150,000.00
Accounts Payable.....		250,000.00
Deposits on Orders.....		50,000.00
Mortgage on Plants.....		150,000.00
Controlled Company Current Account.....	20,000.00	
Partners' Capital.....		739,000.00
	<u>\$1,339,000.00</u>	<u>\$1,339,000.00</u>

The controlled company's trial balance December 31, 1914, was:

Cash	\$ 5,000.00	
Logs and Manufactured Lumber.....	40,000.00	
Timber Lands.....	50,000.00	
Accounts Receivable.....	70,000.00	
Mills	100,000.00	
Bills Payable.....		\$100,000.00
Blank Firm.....		30,000.00
Accounts Payable.....		20,000.00
Capital		100,000.00
Surplus		15,000.00
	<u>\$265,000.00</u>	<u>\$265,000.00</u>

The following matters disclosed by the accountant's examination were not included in the accounts prior to clos-

ing, December 31, 1914. The appraised value of the timber lands of the firm, consisting of 200 square miles, is \$3,000 per square mile, and those of the controlled company, 20 square miles, at the same price per square mile, and the owners wish these taken up in the accounts. There are unpaid license fees on the timber lands of the firm due in 1920, of \$8 per square mile, which must be paid to retain the privilege of cutting the timber under the stumpage agreement. \$50,000 of the bills payable of the controlled company were indorsed by the firm, and the latter also discounted customers' notes amounting to \$25,000. The difference in the intercompany accounts consisted of a charge by the firm to advances on logging operations instead of to the controlled company. There were prepaid taxes in the controlled company of \$2,000. The stock on hand of logs and lumber were pledged as security for loans of \$100,000.

Prepare:

- (a) Adjusting entries for above.
- (b) Corrected trial balances.
- (c) Consolidated balance sheet.
- (d) Write a brief report covering the examination and balance sheet. (Massachusetts, 1915.)

Answer to Question II

(a) Adjusting entries:

On books of the "blank" firm:

Timber Lands.....	\$100,000.00	
To Partners' Capital.....		\$100,000.00
To bring the book value of the timber lands owned by the firm into agreement with the appraised value of \$3,000 per square mile.		
Partners' Capital.....	1,600.00	
To Accrued License Fees.....		1,600.00

Controlled Company, Current Account.....	10,000.00	
To Advances on Logging Operations....		10,000.00
Amount charged the latter account in error.		

The amount of the second entry above is based on the assumption that the given figure of \$8 per square mile represents the accruals *to date* of a uniformly increasing liability, and that it applies to all the land of the firm, or 200 square miles. We are not told how long the agreement has been running, nor the annual rate, nor just when it is to be paid; nor is any explanation given of why the payment should be deferred until 1920. It is impossible to compute the amount of the payment to be made in 1920. On the other hand, if we interpret the question to mean that the amount due in 1920 will be \$8 per square mile, we are left entirely without means of computing the accruals *to date*.

On the books of the controlled company:

Timber Lands.....	\$10,000.00	
To Surplus.....		\$10,000.00
To bring the book value of the timber lands owned by the company into agreement with the appraised value of \$3,000 per square mile.		
Prepaid Taxes.....	2,000.00	
To Surplus.....		2,000.00
To correct error in not taking account of prepaid taxes at closing of books.		

(b) Adjusted trial balances:

Books of the firm:

Cash	\$20,000.00
Accounts Receivable.....	150,000.00
Logs and Manufactured Lumber.....	200,000.00
Advances on Logging Operations.....	90,000.00
Investment in Controlled Company (900 shares), at cost.....	99,000.00
Timber Lands, appraised value.....	600,000.00

BALANCE SHEETS, CONSOLIDATED

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Mill Plants and Equipment, at cost.....	250,000.00	
Controlled Company, Current Account.....	30,000.00	
Loans Payable.....		\$150,000.00
Accounts Payable.....		250,000.00
Deposits on Orders.....		50,000.00
Mortgage on Plants.....		150,000.00
Partners' Capital.....		837,400.00
Reserve for License Fees.....		1,600.00
	<u>\$1,439,000.00</u>	<u>\$1,439,000.00</u>

Books of the controlled company:

Cash	\$5,000.00	
Accounts Receivable.....	70,000.00	
Logs and Manufactured Lumber.....	40,000.00	
Timber Lands.....	60,000.00	
Mills	100,000.00	
Prepaid Taxes.....	2,000.00	
Bills Payable.....		\$100,000.00
Blank Firm.....		30,000.00
Accounts Payable.....		20,000.00
Capital Stock (1,000 shares).....		100,000.00
Surplus		27,000.00
	<u>\$277,000.00</u>	<u>\$277,000.00</u>

(c) Consolidated balance sheet, December 31, 1914:

BLANK FIRM AND CONTROLLED COMPANY

Assets

Cash	\$25,000.00	
Accounts Receivable.....	220,000.00	
Logs and Manufactured Lumber.....	240,000.00	
Advances on Logging Operations.....	90,000.00	
Timber Lands, at appraised value (\$3,000 per square mile).....	660,000.00	\$1,235,000.00
Mill Plants and Equipment, at cost, disregarding depreciation		350,000.00
Prepaid Taxes.....		2,000.00
Total Assets.....		<u>\$1,587,000.00</u>

Liabilities and Net Worth

Loans Payable.....	\$250,000.00	
Accounts Payable.....	270,000.00	
Deposits on Orders.....	50,000.00	\$570,000.00
Mortgage on Plants.....		150,000.00
Accrued License Fees.....		1,600.00
Total Liabilities.....		\$721,600.00
Nine-tenths of Capital and Surplus of Controlled Company, being actual value of partners' investment therein.....	\$114,300.00	
Less Book Value Partners' Inv. therein.....	99,000.00	
Adjustment to be added to Book Value of Partners' Capital.....	\$15,300.00	
Book Value of Partners' Capital.....	837,400.00	
Net Investment of Partners.....	\$852,700.00	
One-tenth of Capital and Surplus of Controlled Company, being actual value of the investment of minority stockholders therein	12,700.00	
Total Net Worth.....		\$865,400.00
		<u>\$1,587,000.00</u>

NOTES: Contingent liability under customers' notes discounted, \$25,000. Loans payable amounting to \$100,000 are secured by pledge of the stock of logs and lumber.

(d) Report:

Blank Firm,

Boston, Mass., October 15, 1915.

Dear Sirs:—

At your request, I have made an examination of the accounts of your firm and of the Controlled Company, for the purpose of ascertaining the true financial condition thereof as of December 31, 1914, and I present herewith a consolidated balance sheet showing such financial condition.

All the liabilities shown in this balance sheet have been verified by me, and I have been unable to discover any further liabilities. The cash and accounts receivable have also been verified by me, and in my opinion sufficient provision has been made for doubtful accounts.

The inventories of logs and lumber were taken and figured by the

employees of the respective concerns, and I am informed that these inventories are valued at cost.

The book value of timber lands has been brought into agreement with the value shown by the appraisal of Messrs. Doe and Roe as of said date of December 31, 1914.

The plant and equipment is shown at actual cost, no improper charges having been made to the accounts, and depreciation having been disregarded.

In preparing this balance sheet I have taken into account accrued license fees and prepaid taxes which did not appear on the books.

Certain contingent liabilities and secured claims will be found noted below the balance sheet.

Very truly yours,

....., C.P.A.

Comments on Problem

There are several matters in the course of this solution upon which differences of opinion may arise.

The adjustment to bring book value of timber lands up to the appraised value might have been credited to a special account of some sort, in each set of books, but in the writer's opinion nothing is thereby gained. If the lands of the firm are really worth \$600,000, the real present net worth of the firm (which is all that partners' capital stands for) is \$839,000, and there seems no useful purpose served by having this figure divided between two accounts. Similarly in the controlled company, if the value of the land is understated, the net worth is also understated, which means that surplus is understated, since net worth is merely capital stock plus surplus, and capital stock is fixed. If it be argued that a dividend could not be paid out of a surplus so created, the reply is that a dividend is never *paid* out of surplus, but is *declared* out of surplus, and may be declared out of any surplus that is actual and not fictitious, however it may have been created, such course being both legal and proper.

The lack of definiteness in the data regarding the license fee is, of course, to be deplored in an examination question.

If this were a fee applying to some particular tract of timber land, payable before any timber could be cut from that tract, the full amount would be a deduction from the value of the tract. But it appears to be due at a specified date, and to apply to all the land of the firm. Under these circumstances, the most natural assumption seems to be that this is a steadily accruing charge for the period of the agreement, and this has been done in the above solution, the accrual to date being shown as a deferred liability.

Mention might perhaps be made of the indorsement by the firm of \$50,000 of the company's paper. But this amount is already included in the liabilities of the consolidated balance sheet, and to mention it again might be misleading, since the indorsement of course does not double the liability of the consolidation.

The error of \$10,000 need not be mentioned in the report, because this is simply a technical error.

It is, of course, unusual for land to appear among the current assets. But timber land is the raw material account of these concerns; its value is changing almost daily as the timber is cut and transferred to logs account, and it could be sold, as standing timber, at any time; therefore it has all the characteristics of a current asset.

The computation of the actual investment of the partners is clearly set forth on the balance sheet itself. The student might consider that it would be simpler to make an entry on the books of the firm to reduce the investment in the company to the *par* value of the stock owned, and then credit the partners, in the consolidated balance sheet, with nine-tenths of the company's surplus. It is true that the result would be the same, in the consolidation; but there is no reason for the entry *on the firm's books*. The only logical entry on those books would be an *increase* in the book investment from cost \$99,000, to actual present value \$114,300.

BALANCE SHEETS, NATIONAL BANK

Question I

Construct a balance sheet for a national bank, showing every possible item which should appear in one. (Michigan, December, 1915.)

Answer

REPORT OF THE CONDITION OF THE

"A" NATIONAL BANK

At the Close of Business on the 24th Day of November, 1916

<i>Resources</i>		<i>Liabilities</i>	
Cash on Hand.....	\$7,400,000.00	Capital Stock.....	\$10,000,000.00
Cash Items.....	2,000.00	Surplus.....	3,000,000.00
Exchanges.....	3,000,000.00	Surplus Fund.....	2,000,000.00
Due from Trust Companies, Banks, and Bankers.....	6,000,000.00	Undivided Profits...	545,550.00
Foreign Money.....	500.00	Circulation	2,000,000.00
Stock and Bond Investments	16,000,000.00	Deposits of Individuals, etc.....	30,000,000.00
Loans—Demand....	10,000,000.00	Due Banks and Trust Companies.....	5,000,000.00
Loans—Time.....	5,000,000.00	Deposits Secured by Pledge of Assets..	200,000.00
Bills Discounted...	8,000,000.00	Time Certificates of Deposit.....	1,000,000.00
Overdrafts	50.00	Demand Certificates of Deposit.....	1,000,000.00
Bonds and Mortgages	40,000.00	Certified Checks....	250,000.00
Banking House.....	200,000.00	Cashiers' Checks....	300,000.00
Accrued Interest entered on books....	50,000.00	Margin Certificates Outstanding.....	300,000.00
Accrued Interest not entered on books..	5,000.00	Unpaid Dividends...	2,500.00
Customers' Liability on Acceptances, per contra liability....	250,000.00	Acceptance of Drafts payable at a future date or authorized under Commercial Letters of Credit, per contra asset...	250,000.00
Foreign Capital Investment.....	200,000.00		
Suspense Account...	25,000.00		

BALANCE SHEET—*Continued*

	Bills Payable.....	200,000.00
	Mortgages on Real Estate Owned.....	100,000.00
	Reserve for Taxes..	10,000.00
	Reserve for Interest on Deposits.....	5,000.00
	Accrued Interest entered on books....	3,000.00
	Accrued Interest not entered on books..	1,500.00
	Unearned Interest and Discount.....	2,000.00
	Accrued Expenses...	3,000.00
	<u>\$56,172,550.00</u>	<u>\$56,172,550.00</u>

BANK PASS-BOOK

Question I

In auditing a firm's accounts, would you accept the pass-book regularly balanced by the bank, as an evidence of the correctness of the transactions that had taken place between it and your client? Give reasons. (Ohio, 1915.)

Answer

Practicing auditors find that the best policy is to obtain an independent verification of the bank balance and to make an independent reconciliation with the bank pass-book.

It would be a simple matter for a dishonest cashier to obtain an extra pass-book and to falsify the deposits and returned check totals so that the net result will reconcile

with falsified results in the cash book. He would, of course, substitute the extra pass-book for the one containing the true entries at the time of the audit. The growing practice of rendering statements by banks instead of balancing on the face of the pass-book renders the manipulation more difficult but it may still be possible to obtain extra copies of such bank statements.

BANKRUPTCY, INSOLVENCY, AND LIQUIDATION

Question I

What schedules are required in bankruptcy, and what is included in each? (Maryland, February, 1915.)

Answer

Schedule A — Statement of All Debts of Bankrupt:

- I Statement of all creditors who are to be paid in full, or to whom priority is secured by law.
- II Creditors holding securities.
- III Creditors whose claims are unsecured.
- IV Liabilities on notes or bills discounted which ought to be paid by the drawers, makers, acceptors, or indorsers.
- V Accommodation paper.

Schedule B — Statement of All Property of Bankrupt:

- I Real estate.
- II Personal property.

- III Choses in action.
- IV Property in reversion, remainder, or expectancy, including property held in trust for the debtor or subject to any power or right to dispose of or to charge.
- V A particular statement of the property claimed as exempt from the operations of the acts of Congress relating to bankrupts, giving each item of property and its valuation, and, if any portion of it is real estate, its location, description, and present use.
- VI Books, papers, deeds, and writings relating to bankrupt's business and estate.

Summary of Debts and Assets

Question II

(a) What statements are drawn up to present the affairs of an insolvent business? Give a form of such a statement without figures.

(b) What statement is drawn up at the end of a receivership, to show the result of the same? Give a form of such statement, without figures. (Nebraska and Wisconsin, 1915.)

Answer

- (a) Statement of affairs and deficiency account.

STATEMENT OF AFFAIRS

<i>Assets</i>		Book Value	Expected to Realize
Cash		\$.....	\$.....
Notes Receivable.....			

Accounts Receivable:

Good		
Doubtful		
Bad		
Merchandise		

Total Current Assets.....	\$.....	\$.....
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Real Estate.....	\$.....	\$.....
Buildings		
Furniture and Fixtures.....		
Investments		
(Securities given deducted from liabilities)		

Total Capital Assets.....	\$.....	\$.....
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Total Assets.....	\$.....	\$.....
Less Preferred Liabilities.....		

Assets Available for Distribution.....	\$.....
Deficiency	

Equals Total Liabilities.....	\$.....
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Liabilities

Notes Payable:

	Book Value	Expected to Rank
Unsecured	\$.....	\$.....
Partly Secured.....		
Fully Secured (contra).....		

Accounts Payable:

Unsecured		
Partly Secured.....		
Fully Secured (contra).....		

Contingent:

Notes Discounted.....		
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Preferred:

Taxes	
Wages	
(Deducted from Assets)	

Total Liabilities.....	\$.....	\$.....
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DEFICIENCY ACCOUNT

Operating Losses..... \$.....	Capital..... \$.....
Shrinkage in Assets... ..	Deficiency..... ..
<u>\$.....</u>	<u>\$.....</u>

(b)

REALIZATION AND LIQUIDATION ACCOUNT

Assets to be Realized	Liabilities to be Liquidated
Liabilities Liquidated	Assets Realized
Supplementary Debits	Supplementary Credits
Liabilities Not Liquidated	Assets Not Realized
Gain	Loss

Question III

Two concerns failed, owing each other money, the amounts of which were included in their respective Accounts Payable accounts. A summary balance sheet of X, which is accepted as correct, is as follows:

BALANCE SHEET OF FIRM X

Due from Y.....	\$10,000.00	Due to Y.....	\$40,000.00
All Other Assets.....	180,000.00	All Other Liabilities..	200,000.00
Deficit	50,000.00		
	<u>\$240,000.00</u>		<u>\$240,000.00</u>

A summary balance sheet of Y, which is accepted as correct, is as follows:

BALANCE SHEET OF FIRM Y

Due from X.....	\$40,000.00	Due to X.....	\$10,000.00
All Other Assets.....	160,000.00	All Other Liabilities..	270,000.00
Deficit	80,000.00		
	<u>\$280,000.00</u>		<u>\$280,000.00</u>

The court holds that it is unfair to other creditors to allow such firms to strike a balance between their respective accounts and then to settle with the outside creditors on a percentage basis. Accordingly, it is necessary to obtain the "ratio of solvency," i.e., the percentage (how many cents on the dollar) each concern will be able to pay on the basis of the respective balance sheets. Determine this "ratio of solvency" for each firm. (New York, June, 1915.)

Answer to Question III

Let X's rate of solvency = x

Let Y's rate of solvency = y

Then

$$x = \frac{\$180,000 + \$10,000y}{\$240,000}$$

$$y = \frac{\$160,000 + \$40,000x}{\$280,000}$$

In solving these equations we have:

$$24x = 18 + y \text{ or } \dots\dots\dots 24x - y = 18$$

$$28y = 16 + 4x$$

$$\text{or } -4x + 28y = 16 \text{ or } \dots\dots\dots -24x + 168y = 96$$

$$\text{Therefore: } 167y = \$114$$

$$\text{Consequently } y = \frac{114}{167} = \$0.682634731$$

If we substitute the value of y in x , we have:

$$24x - .682634731 = \$18$$

$$24x = \$18.682634731$$

$$x = \frac{\$18.682634731}{24} = \$0.7784431$$

Therefore

X's rate of solvency is \$.7784 per \$1.00

Y's rate of solvency is \$.6826 per \$1.00

Question IV

The accounts of a partnership include:

Cash	\$1,400.00
Merchandise	15,000.00
Accounts Receivable.....	20,000.00
Notes Receivable.....	4,000.00
Machinery	7,000.00
Real Estate.....	5,000.00
Investments	2,500.00
Mortgage Payable on Real Estate.....	3,000.00
Notes Payable.....	16,000.00
Accounts Payable.....	35,000.00
Taxes Due.....	500.00
Wages Due.....	1,000.00
Rent Due.....	700.00
Notes Receivable Discounted.....	3,000.00
Partners' Accounts.....	12,000.00

All the investments are pledged as collateral on \$1,500 notes payable. Of the accounts receivable \$1,000 are con-

sidered bad, \$2,500 doubtful and worth 50% of book value, and the balance good. Real estate is undervalued 10%. Merchandise is subject to a discount of 25%. Machinery is overvalued 25%. \$2,000 notes receivable discounted have been paid by makers. Expense of liquidation estimated to amount to \$1,500. The partners have personal estates valued at \$4,000.

Prepare such statements as seem desirable under the circumstances, and state probable amount for distribution among creditors. (Massachusetts, 1915.)

Answer to Question IV

The statements desirable under the circumstances would appear to be the trial balance as per the books, statement of affairs and deficiency account.

TRIAL BALANCE

Cash	\$1,400.00	
Merchandise	15,000.00	
Accounts Receivable.....	20,000.00	
Notes Receivable.....	4,000.00	
Machinery	7,000.00	
Real Estate.....	5,000.00	
Investments	2,500.00	
Mortgage Payable on Real Estate.....		\$3,000.00
Notes Payable.....		16,000.00
Accounts Payable.....		35,000.00
Taxes Due.....		500.00
Wages Due.....		1,000.00
Rent Due.....		700.00
Notes Receivable Discounted.....		3,000.00
Partners' Accounts.....		12,000.00
Balance, deficit.....	16,300.00	
	<u>\$71,200.00</u>	<u>\$71,200.00</u>

Adjusting entry required:

Notes Receivable Discounted.....	\$2,000.00	
To Notes Receivable.....		\$2,000.00
For notes known to have been paid by makers.		

STATEMENT OF AFFAIRS

<i>Assets</i>	Book Value	Expected to Realize
Cash	\$1,400.00	\$1,400.00
Accounts Receivable—Good.....	16,500.00	16,500.00
" "—Doubtful	2,500.00	1,250.00
" "—Bad	1,000.00	
Notes Receivable.....	\$2,000.00	
Less Notes Receivable Discounted..	1,000.00	1,000.00
Merchandise	15,000.00	11,250.00
Real Estate.....	\$5,000.00	
Less Mortgage.....	3,000.00	2,500.00
Machinery	7,000.00	5,250.00
Investments	\$2,500.00	
Less Secured Notes Payable.....	1,500.00	1,000.00
Partners' Personal Estates.....		4,000.00
Total Assets.....		\$44,150.00
Less Preferred Claims:		
Taxes	\$500.00	
Wages	1,000.00	1,500.00
		\$42,650.00
Less Estimated Expenses of Realization.....		1,500.00
Net amount assets are expected to realize for creditors....		\$41,150.00
Deficiency, as per Deficiency Account.....		9,050.00
		<u>\$50,200.00</u>

<i>Liabilities</i>	Book Value	Expected to Rank
Mortgage on Real Estate (contra)...	\$3,000.00	
Notes Payable—Secured (contra)....	1,500.00	
" "—Unsecured	\$14,500.00	\$14,500.00

BANKRUPTCY, INSOLVENCY

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Accounts Payable.....	35,000.00	35,000.00
Rent Due.....	700.00	700.00
Taxes Due (deducted contra).....	500.00	
Wages Due " "	1,000.00	
		<u>\$50,200.00</u>

DEFICIENCY ACCOUNT

Book Deficit, Trading		Partners' Capital.....	\$12,000.00
Loss	\$16,300.00	Partners' Personal Estate	4,000.00
Shrinkage in Accounts		Appreciation of Real	
Receivable	2,250.00	Estate	500.00
Shrinkage in Merchandise Inventory.....	3,750.00	Net Deficiency, as on	
Shrinkage in Machinery	1,750.00	Statement of Affairs..	9,050.00
Expenses of Realization, estimated.....	1,500.00		
	<u>\$25,550.00</u>		<u>\$25,550.00</u>

It is assumed that the value given of the partners' personal estates is *net*; the claims of the personal creditors of either partner must be met out of his estate before any of it is available for the creditors of the firm.

There is a contingent liability of \$1,000 under notes receivable discounted, not yet due. It is, however, assumed that these notes will be paid by the makers when due. Under this assumption, provided the assets realize the values as estimated above, there will be available assets of \$41,150 to meet unsecured claims of \$50,200, so that each creditor would receive about 82% of his claim. If the notes discounted are not paid at maturity by the makers, the claims would amount to \$51,200, and in this case each creditor of the firm would receive a little over 80% of his claim.

Question V

A trading corporation votes to go into voluntary liquidation, the directors (three in number) being appointed trustees, to realize on the assets and pay the debts. What change, if any, should be made in the books of the corporation and how should the trustees' transactions be recorded? (New York, June, 1915.)

Answer

The appointment of the directors in their fiduciary capacity can be shown on the books by opening an account with them, sometimes technically known as a "Realization and Liquidation" account.

This account is debited with:

1. All the assets to be realized.
2. New assets representing additional income during liquidation.
3. Increases of assets due to gains during liquidation.
4. Liabilities as they are liquidated.
5. Cash distributed to stockholders.

The account is credited with:

1. All the liabilities to be liquidated.
2. New liabilities incurred during liquidation.
3. Realization of assets.
4. Losses on realization of assets.

At the end of the trusteeship period, the trustees should render what is known as a trustee's cash account.

Question VI

The Parker Construction Company is unable to meet its obligations and is forced into liquidation. At the time the receiver takes charge of its affairs, the following trial balance is prepared from the company's books:

Cash	\$500.00	
Land and Buildings.....	10,000.00	
Mortgages on Land and Buildings.....		\$8,000.00 ✓
Plant and Equipment.....	20,000.00	
Creditors		59,400.00
Completed Contract Accounts (losses).....	18,000.00	
Capital		50,000.00
Uncompleted Contract Accounts (outlay).....	30,000.00	
Securities Acquired in Settlements.....	15,000.00	
Debtors' Accounts for Completed Contracts...	6,000.00	
Expenses	6,500.00	
Inventory of Materials.....	2,000.00	
Profit and Loss (deficiency).....	9,400.00	
	<u>\$117,400.00</u>	<u>\$117,400.00</u>

The sureties on the unfinished contracts estimate that a further outlay of \$20,000 will be required to complete the work and realize the contract price of \$40,000, and their offer to take over the materials on hand for \$1,500, as part of said cost, is accepted by the receiver. Of the securities acquired, \$5,000 is pledged to secure \$11,000 due creditors, and \$10,000 is pledged to secure \$9,000 due creditors. The company owes for taxes on real estate \$100, and for salaries and wages of employees \$1,200, which sums do not appear on the books. (The company has discounted customers' notes for \$3,000, of which subsequent advices indicate that \$1,000 will be dishonored, and a debtor owing \$1,500 on unsecured account has failed and disappeared.) It is estimated that the amount realized on land and buildings will be sufficient to satisfy the mortgage only, and the plant and equipment will realize only 6% of the book value.

Prepare a statement of affairs and deficiency account. (Maine, 1915.)

Answer to Question VI

The realization of plant and equipment as 6% of book value, is no doubt a misprint; it should logically read 60%

PARKER CONSTR

EXHI

STATEMENT OF AFF

Liabilities

Gross Liabilities	In Order of Priority	Schedule	Expected to Rank
\$1,200.00	Preferential Claims:	A	
	Wages and Salaries (no more than \$300 to any one individual)—deducted from Assets, contra.....		<u>\$1,200.00</u>
9,000.00	Creditors Fully Secured.....	B-1	<u>\$9,000.00</u>
	Deduct:		
	Collateral Securities, estimated to produce		<u>10,000.00</u>
	Excess on Realization, estimated—added to Assets.....		<u>\$1,000.00</u>
20,000.00	Creditors Fully Secured.....	B-2	
	Securities on Uncompleted Contracts for Funds necessary to Complete.....		<u>\$20,000.00</u>
	Deduct:		
	Transfer Stock of Materials on hand at Value		<u>1,500.00</u>
	Deducted from contract price to be realized, contra.....		<u>\$18,500.00</u>
11,000.00	Creditors Partly Secured.....	C-1	<u>\$11,000.00</u>
	Deduct:		
	Collateral Securities, estimated to produce		<u>5,000.00</u>
8,100.00	Creditors Partly Secured.....	C-2	
	Taxes (City).....		<u>\$100.00</u>
	Mortgages		<u>8,000.00</u>
			<u>\$8,100.00</u>
	Deduct:		
	Land and Buildings, estimated to realize.		<u>8,000.00</u>
39,400.00	Creditors Unsecured.....	D	<u>100.00</u>
1,000.00	Contingent Liability on Customers' Notes Discounted (\$3,000), on which the estate is liable to the extent of (estimated)....	E	<u>39,400.00</u>
			<u>1,000.00</u>

\$89,700.00\$46,500.00

UCTION COMPANY

BIT A

AIRS, AT

<i>Assets</i>			
Nominal Value	In Order of Probable Availability	Schedule	Estimated to Produce
\$500.00	Cash	F	\$500.00
2,000.00	Materials on Hand transferred to sureties, as per offer, contra	G	\$1,500.00
15,000.00	Securities in Hands of: Fully Secured Creditors....	H-1	\$10,000.00
	Party Secured Creditors.....		5,000.00
	Deducted, contra.....		\$15,000.00
10,000.00	Land and Buildings.....	H-2	
	Security for Taxes and Mortgage deducted, contra.....		\$8,000.00
6,000.00	Debtors' accounts.....	I	
	Good		\$4,500.00
	Bad		1,500.00
			\$6,000.00
20,000.00	Plant and Equipment, 6% of Book Value	J	1,200.00
30,000.00	Outlay on Uncompleted Contracts	K	
	Contract Price when completed Deduct:		\$40,000.00
	Fund necessary for completion		\$20,000.00
	Stock of Materials taken over		1,500.00
	Excess in Hands of Fully Secured Creditors: Securities per contra.....		1,000.00
\$83,500.00			\$28,700.00
	Deduct:		
	Preferential Claims, per contra		1,200.00
	Net Free Assets, as per estimate, available for division among Unsecured Creditors.....		\$27,500.00
	Ratio of Solvency \$.5914 per dollar. Subject to the Receiver's, Attorney's, Referee's, and Marshal's Fees and the expenses of this Receivership.		
6,200.00	Deficiency in Business and on Realization accounts, from Exhibit B.....		19,000.00
<u>\$89,700.00</u>			<u>\$46,500.00</u>

PARKER CONSTRUCTION COMPANY

EXHIBIT B

DEFICIENCY ACCOUNT AT

<i>To Be Accounted For:</i>	
Capital as listed in Balance Sheet at time Receiver takes charge (No details as to how composed and when put in).....	\$50,000.00
<i>Accounted for Prior to Receivership:</i>	
Contract Losses:	
Completed Contracts accounts.....	\$18,000.00
Business Expenditures:	
Expenses.....	6,500.00
Losses of previous periods shown by debit side of open Profit and Loss Account....	9,400.00
Total Business Losses.....	<u>\$33,900.00</u>
Preferential Claims for Wages—Salaries omitted from books of account.....	1,200.00
Taxes on Real Estate omitted from books of account.....	100.00
Contingent Liability for Indorsement on Discounted Notes Receivable now ranking against the Estate.....	1,000.00
Shrinkage of Capital due to Business Reverses.....	<u>\$36,200.00</u>
Balance of Capital remaining, carried down..	13,800.00
	<u><u>\$50,000.00</u></u>

BANKRUPTCY, INSOLVENCY

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Capital remaining after deduction of shrinkage as above, brought down.....	\$13,800.00	Accounted for by Completing Contracts in Process:	\$20,000.00
Deficiency as between Nominal Value of Assets and Gross Liabilities, carried down /	6,200.00	Outlays necessary to finish work.....	\$20,000.00
	<u>\$20,000.00</u>		<u>\$20,000.00</u>
Realization Price of Uncompleted Contracts when completed.....	\$40,000.00	Deficiency as shown, brought down...	\$5,200.00
Less Outlays to date of Receiver-ship on same.....	30,000.00	Accounted for by Receiver's Estimate of Losses on Realization of Assets:	
Nominal Gain thereon.....	\$10,000.00	Materials on Hand.....	\$500.00
(Subject to outlays necessary to finish work, per contra, \$2,000, showing Net Loss on Contracts \$10,000.)		Absconded Debtor Account.....	1,500.00
Deficiency as shown on Statement of Affairs, Exhibit A.....	19,000.00	Land and Buildings.....	2,000.00
	<u>\$29,000.00</u>	Plant and Equipment.....	18,800.00
			<u>\$29,000.00</u>

as, no matter how old such a fixed asset would be, if kept in any shape or working order, even as forced sale, it would bring somewhat more than 60%, provided that the amount shown on the books represents actual cost. However, in the solution given below, the realizable value of 6% has been taken into consideration.

A word about taxes as given in the problem: it is usually believed that taxes, whether due the government, any state, county, or city, always rank as a preferential claim to be deducted from the assets. This is legally true when reference is had to personal taxes, but taxes on real property are primarily a lien thereon and would be paid from the proceeds of sale; taxes would be paid first, and any deficiency to the mortgagee would be paid with the other unsecured creditors ratably in due course when a judgment is allowed by the court.

Question VII

1. The firm of Causton & Ennis was obliged to call a meeting of their creditors on July 1, 1913, when it was shown that the firm was unable to meet impending obligations or otherwise finance its business without assistance.

A friendly receiver was appointed who took over the affairs of the firm and continued operation and conduct of the business, without any active assistance of the partners, for one year, ending June 30, 1914, during which time the partners received no money or property from the receiver.

Trial balance of the firm on July 1, 1913, was as follows:

Cash.....	\$203.90	
Bills Receivable.....	2,500.00	
Accounts Receivable.....	11,348.27	
Fixtures.....	400.00	
Good-Will.....	10,000.00	
Accounts Payable.....		\$16,320.94

BANKRUPTCY, INSOLVENCY

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Bills Payable.....		3,500.00
J. H. Causton, Personal Account.....	225.44	
J. H. Causton, Capital Account.....		2,931.48
Jas. Ennis, Personal Account.....	246.30	
Jas. Ennis, Capital Account.....		3,028.57
Reserve for Bad Accounts.....		1,135.00
Reserve for Depreciation of Fixtures.....		80.00
Purchases.....	6,998.12	
Purchases Returned.....		88.25
Discount and Interest.....	231.49	
Wages and Salaries.....	1,470.50	
Rent.....	300.00	
Miscellaneous Supplies and Expense.....	215.61	
General Expense.....	138.24	
Sales.....		7,266.38
Return Sales.....	72.75	
	<u>\$34,350.62</u>	<u>\$34,350.62</u>

On March 1, 1913, inventory of merchandise was \$1,250, and this amount is included in the purchases as stated in the trial balance. Inventory on July 1, 1913, was \$1,500. No other inventories were taken.

The receiver collected accounts and notes receivable outstanding July 1, 1913, to the amount of \$11,376.45, of which \$2,000 was from bills receivable. The balance of the notes and accounts he declared to be worthless. He paid in full all bills payable at July 1, 1913, and settled all accounts payable at July 1, 1913, at 75 cents on the dollar.

On June 30, 1914, the receiver returned to Causton & Ennis such assets of July 1, 1913, as still remained in his possession; he also turned over to them the assets and liabilities which resulted from his operation of the business.

A summary of the receiver's operation showed the following transactions:

Inventory, June 30, 1914.....	\$1,875.00
Cash Payments for Purchases.....	12,993.73
Cash Received from New Customers.....	24,981.16

Receiver's Fees and Expenses (paid in cash).....	1,471.98
Operating Expense.....	6,146.87
Purchases, not including inventory of July 1, 1913.....	14,948.34
Sales.....	25,551.21

Please prepare statements necessary to show :

- (a) Result of realization and liquidation.
- (b) Result of receiver's trading.
- (c) Net result of both.

Receiver's cash account and his balance sheet as at June 30, 1914, are not required. (Nevada, 1915.)

Answer to Question VII

Although it is specifically mentioned in the question that the receiver's cash account and the balance sheet at the expiration of the receivership are not required, it is necessary that the candidate prepare them for himself at least, if not for the examiners, to prove the correctness of his work.

The receiver is not chargeable for the item of good-will under the circumstances here outlined, except in case it is put up for sale with other chattels for the payment of debts. The partners' capital accounts and their withdrawals as shown in the trial balance do not concern the receiver and are subject to adjustment between themselves only. Before proceeding further it might be stated that it is regrettable to see in an examination paper discount and interest mingled together, as also wages and salaries.

The problem states that a friendly receiver was appointed; by this is meant, inasmuch as a meeting of creditors was called, that a receiver in bankruptcy was appointed by a bankruptcy court to act as trustee in behalf of the creditors; in this case he continued the business for the period

of one year for the purpose of rehabilitation and to secure as large a dividend for the creditors as possible; this he succeeded in doing. The statement of condition of the firm at the time the receiver took charge shaped itself as follows:

<i>Assets</i>		<i>Liabilities</i>	
Cash.....	\$203.90	Bills Payable.....	\$3,500.00
Bills Receivable.....	2,500.00	Accounts Payable.....	16,320.94
Accounts Receivable...	11,348.27		
Merchandise Inventory	1,500.00		
Fixtures.....	400.00		
	\$15,952.17		\$19,820.94

It will be noted that reserves have been eliminated and also that the receiver did not prepare the customary statement of affairs on which he would base his estimate on assets realization rather than on the book values as shown in the balance sheet of the bankrupt or embarrassed firm. In the absence of fully or partly secured creditors and on the assumption that all assets could readily be converted into cash at 100 cents on the dollar without any expenses inherent to realization and liquidation or receiver's fees, the ratio of solvency would be \$.805 on the dollar. As a result of his administration, he was able to pay the bills payable in full, pay his own fees and expenses, pay 75 cents on the dollar to the general creditors, and return the business to the debtors.

Under the amendment of 1910 to the Bankruptcy Act. Section 48, a receiver gets as compensation for his work a remuneration based upon moneys paid out by him, or afterwards realized by the owners or trustee from assets turned over by the receiver to them, as follows: 6% on the first \$500, 4% on the next \$1,000, 2% on the remainder up to \$10,000, and 1% above \$10,000. Should he continue the

WORKING
RECEIVER FOR THE FIRM
From July 1, 1913

	BALANCE SHEET JULY 1, 1913		ELIMINATIONS	
	Assets	Liabilities	Assets Not Chargeable to Receiver	Liabilities which He Does Not Liquidate nor Take Credit For
Cash	\$203.90			
Bills Receivable.....	2,500.00			
Accounts Receivable.....	11,348.27			
Merchandise Inventory.....	1,500.00			
Fixtures	400.00			
Good-Will	10,000.00		\$10,000.00	
Bills Payable.....		\$3,500.00		
Accounts Payable.....		16,320.94		
Bad Debts Reserve.....		1,135.00		\$1,135.00
Depreciation of Fixtures.....		80.00		80.00
Capital Accounts.....		4,916.23		4,916.23
	<u>\$25,952.17</u>	<u>\$25,952.17</u>	<u>\$10,000.00</u>	<u>\$6,131.23</u>
Sales Proceeds.....				
Purchases				
Operating Expenses.....				
Accounts Payable, Causton & Ennis (balance).....				
Receiver's Fees and Expenses.....				
Cash on Hand at End of Receivership.....				
Net Gain on Liquidation.....				
Merchandise Inventory at End of Receivership.....				
Net Gain of Receiver.....				
Net Assets Turned Over to Causton & Ennis.....				

*Final columns of working sheet are given on page 102.

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OF CAUSTON & ENNIS
to June 30, 1914

STATEMENT OF CONDI- TION, JULY 1, 1913		RECEIVER'S CASH TRANSACTIONS		REALIZATION AND LIQUIDATION RESULTS		RECEIVER'S TRADING OPERATIONS	
Resources	Liabilities	Receipts	Payments	Losses	Gains	Charges	Credits
\$203.90		\$203.90					
2,500.00		2,000.00		\$500.00			
11,348.27		9,376.45		1,971.82			
1,500.00						\$1,500.00	
400.00							
	\$3,500.00		\$3,500.00				
	16,320.94		(a) 8,080.35				
(c) \$15,952.17	(d) \$19,820.94	\$11,580.35	\$11,580.35	\$2,471.82			
		24,981.16					\$25,551.21
		12,993.73				14,948.34	
		6,146.87				6,146.87	
		(a) 4,160.35			(a) \$4,080.24		
		1,471.98		1,471.98			
		\$36,561.51	\$36,353.28	\$3,943.80	\$4,080.24		
			208.23				
		\$36,561.51	\$36,561.51				
				(b) 136.44			
				\$4,080.24	\$4,080.24		
							1,875.00
						\$22,595.21	\$27,426.21
						(c) 4,831.00	
						\$27,426.21	\$27,426.21

business, an additional amount equivalent to the above, more or less, may be allowed him at the discretion of the court.

The statement given below shows the amounts handled by the receiver and the commission to which he is entitled :

Liquidation of Liabilities of Causton & Ennis	\$11,580.25;	fees	\$255.80
Payments made in pursuance of his continuing the business.....	23,300.95;	"	373.00
Assets turned over to the owners at expiration of receivership.....	2,973.28;	"	99.46
Total fees.....			\$728.26
Expenses not apportioned in the question.....			743.72
Total fees and expenses.....			<u>\$1,471.98</u>

In the solution herewith presented, no apportionment has been made of the above item as between Exhibit A and Exhibit B, as the problem is silent as to the division of the expenses. It was no doubt the intent of the examiners to test the proficiency of the candidates in properly applying accounting principles, without the intention to use this as a catch.

The realization and liquidation statement carries the entire burden of fees and expenses, which it would ordinarily do when the receiver or trustee winds up the business.

The solution of the question, as given below, is based on the data contained in the working sheet appearing on the preceding pages.

EXHIBIT A
STATEMENT OF THE RESULTS OF THE ADMINISTRATION OF CAUSTON & ENNIS
BY RECEIVER, FROM JULY 1, 1913 TO JUNE 30, 1914

<i>Section I—Realization of Assets:</i>		Used	Cash	Returned to
Assets taken over from Causton & Ennis, July 1, 1913:		in Trading Operations	Collections	Causton Losses on & Ennis Realization
Cash	Total		\$203.90	.....
Bills Receivable.....	\$203.90	.....	2,000.00	 \$500.00
Accounts Receivable.....	2,500.00	.....	9,376.45	 1,971.82
Merchandise Inventory.....	11,348.27	.....	.....	.....
Fixtures	1,500.00	\$1,500.00	.....	.....
	400.00	.....	.....	400.00
	<u>\$15,952.17</u>	<u>\$1,500.00</u>	<u>\$11,580.35</u>	<u>\$400.00</u>
				<u>\$2,471.82</u>
<i>Section II—Liquidation of Liabilities:</i>		Liquidated from	Liquidated from Net	Gains on
Liabilities taken over from Causton & Ennis, July 1, 1913:		Realization of Assets	Trading Proceeds	Liquida- tion
Bills Payable.....	Total			.....
Accounts Payable.....	\$3,500.00	\$3,500.00	.....	.....
	16,320.94	8,080.35	\$4,160.35	\$4,080.24
	<u>\$19,820.94</u>	<u>\$11,580.35</u>	<u>\$4,160.35</u>	<u>\$4,080.24</u>

<i>Section III—Summary of Results:</i>			
Assets converted into Cash.....	\$11,580.35	.....	.....
Liabilities liquidated therefrom.....	<u>11,580.35</u>	.....	.....
Residue.....	<u>None</u>	.....	.....
Assets taken over by Receiver for Future Operations.....	<u>\$1,500.00</u>	.....	.....
Assets returned to Causton & Ennis, June 30, 1914.....	.....	\$400.00	.....
Liabilities liquidated from Net Trading Proceeds.....	.....	<u>\$4,160.35</u>	.....
Gains on Liquidation of Liabilities.....	.....	.....	\$4,080.24
Less Losses on Realization of Assets.....	.....	.....	<u>2,471.82</u>
Subject to Expenses and Fees of Receivership, liquidated from Net Trading Proceeds.....	.....	.....	<u>\$1,608.42</u>
Net Gain on Liquidation, transferred to Exhibit C.....	.....	.....	1,471.98
			<u>\$136.44</u>

EXHIBIT B

RECEIVER'S TRADING OPERATIONS

Section I—Operations:

Sales of the Receiver for Cash or Guaranteed Credit..... \$25,551.21

Cost thereof:

Merchandise Inventory taken over, July 1, 1913 \$1,500.00

Purchases of Receiver..... 14,948.34

Operating Expenses..... 6,146.87

\$22,595.21

Less Merchandise Inventory on Hand, June

30, 1914, turned over to Causton & Ennis.. 1,875.00 20,720.21

Net Operating Gain chargeable to Receiver,
transferred to Exhibit C.....

\$4,831.00

Section II—Summary of Results:

The Receiver accounts for the above as follows:

Merchandise Inventory taken over, July 1, 1913..... \$1,500.00

Net Operating Gain as above..... 4,831.00

Total chargeable.....

\$6,331.00

After Paying in Cash All Operating Expenses and
a part of his Purchases, he applies the balance:

To liquidate original Liabilities of Causton &

Ennis (balance)..... \$4,160.35

To liquidate his own Fees and Expenses.... 1,471.98 \$5,632.33

And turns over the residue on June 30,

1914, to Causton & Ennis in the form

of the following Resources:

Cash \$208.23

Uncollected New Customers' Accts. 570.05

Merchandise Inventory..... 1,875.00 \$2,653.28

Subject to a Liability for Unpaid New Purchases 1,954.61

Net Resources..... 698.67

\$6,331.00

EXHIBIT C

RECEIVERSHIP RESULTS CONDENSED

Gains from Liquidation of Liabilities (Accounts Payable settled at 75 cents on the dollar).....	\$4,080.24	
Less Loss on Realization of Assets....	<u>2,471.82</u>	
Gross Liquidation Gain.....		\$1,608.42
Subject to:		
Expenses (Fees of Receiver).....	<u>1,471.98</u>	
Net Gain on Liquidation (transferred from Exhibit A)....		\$136.44
Net Operating Gain during Receivership (transferred from Exhibit B).....		<u>4,831.00</u>
Total Credits from above results.....		\$4,967.44
reverting to Causton & Ennis and subject to adjustment between themselves.		<u><u></u></u>

BANKS AND TRUST COMPANIES

Question I

In auditing the books of a large bank, what method would you adopt to expedite the audit of the clearing house sheet for the day your audit began? (New York, January, 1915.)

Answer

I would mail the clearing house sheet, together with a confirmation, to the clearing house and request them to fill it out and return to the office of the auditor.

Question II

Explain the procedure in the examination of a Massachusetts savings bank. (Massachusetts, 1915.)

Answer

The following description of the procedure in the audit of a savings bank is not intended to be exhaustive, but is so condensed as to bring it within the time limitations set by this examination, in which ten questions must be answered within three hours.

The auditor should begin his audit at the close of a day's business, or before the bank opens in the morning. He should at once take charge of the cash, the check books of depositary banks, and the securities, both those owned by the bank and those held as collateral. If these securities are kept in safe deposit vaults outside the bank, such vaults should be ordered sealed until released by the auditor.

The actual cash should at once be counted; any checks included in the cash balance should be deposited by the auditor with a request that he be notified in case any item is found to be uncollectible. The bank balances should be verified by statements obtained direct by the auditor, duly reconciled for outstanding checks unpaid.

A detailed list of the par and book values of the securities owned by the bank should be prepared from the books; the total book values should, of course, agree with the ledger balances. The actual securities should be checked against this list, and in doing this it should be noticed that they are the property of the bank and that all unmatured coupons are still attached to coupon bonds. Transactions within the period covered by the audit should be evidenced by the debit and credit notes of the brokers handling the transactions.

The personal loans may be secured in various ways, the

most common method being by deposit of collateral. These collaterals should be listed from the notes themselves, any changes, verified by the exchange receipts, being taken into account; and the actual collaterals should be checked against this list. It is also desirable, for complete verification, to request direct from each such borrower a statement of collateral deposited by him. Loans to corporations must be supported by the report of an examining accountant approved by the Bank Commissioner.

Each mortgage loan should be supported by a recorded mortgage to the bank, and by a sufficient unexpired fire insurance policy, payable in case of a loss, to the bank "as its interest may appear." These loans should also be listed and the totals should agree with the general ledger balances.

Each note should be examined and the transactions thereon, principal and interest payments, checked against the investment record or the cash book. New loans and securities bought during the period must have been approved by the board of investment.

The foregoing covers the ordinary assets found in all savings banks, and we may pass on to the liabilities. The only liability account, almost without exception, is the Depositors account. This account must be carefully proved by checking all additions of deposits, withdrawals, and dividends, and following them through the cash book to the general ledger. Draw a trial balance of the individual depositors ledgers (or, with approval of the Bank Commissioner, check such trial balance as was recently drawn by the staff of the bank) and agree the total with the general ledger account. Tests should be made of the postings and extensions on the individual accounts, but it is not usual to check all postings and extensions.

The income for the period must be carefully checked, to ascertain that all the income due has actually been received

and properly accounted for. Any delinquent interest on loans must be reported in detail. The interest on loans paid during the period and dividends on securities sold must be given special attention. The income must be followed through the cash book to the general ledger and ultimately to the Profit and Loss account. The profit and loss must be reported in detail.

The items of expense should be supported by approved receipted vouchers, which should be canceled by the auditor.

In any particular case, special items will probably be found, which must receive such treatment as the circumstances demand; examples of such items are real estate, owned or taken by foreclosure; rentals of real estate owned; premiums; transactions on guaranty fund account; etc.

BOND AMORTIZATION, SINKING FUNDS

Question I

A contractor proposes to build a bridge to Belle Isle and accept the city's 4% 20-year bonds to the amount of \$2,000,000 in payment. He advocates as a means of retiring the bonds the establishment of a toll system on foot passengers and automobiles at the respective rates of 1 and 5 cents each. Assuming the ratio of foot passengers to automobiles to be ten to one, how many of each would be necessary to pay the interest annually and create a fund which placed at the same rate of interest would be sufficient to retire the bonds at maturity?

Note: \$1 compounded at 4% for 20 years = 2.19112314, (Michigan, December, 1915.)

Answer

The first part of this problem is to find the annuity which will, at 4%, build up to \$2,000,000 in 20 years. Now, the amount of an annuity equals the compound interest for the period divided by the rate per period, that is, the amount of an annuity of \$1 for 20 years at 4% equals \$1.19112314 (i.e., \$2.19112314—\$1) divided by .04, which equals \$29.7780785. Hence we have the proportion:

$$\text{\$1} : \text{\$29.7780785} :: \text{X dollars} : \text{\$2,000,000}$$

By long division $X = \$67,163.50$, i.e., the amount of the annual sinking fund, which at 4% will in 20 years build up to \$2,000,000.

In addition to this annual sinking fund of \$67,163.50, there is an annual interest charge of \$80,000, making a total annual charge of \$147,163.50, which is to be met from tolls on foot passengers and automobiles. The revenue from ten foot passengers, as per the problem, would be 10 cents and likewise the revenue from one automobile would be 5 cents. In other words, $\frac{2}{3}$ of the annual tolls, or \$98,109, must come from foot passengers and $\frac{1}{3}$, or \$49,054.50, from automobiles.

$$\text{\$98,109.00} \div .01 = 9,810,900 \text{ required number of foot passengers per annum.}$$

$$\text{\$49,054.50} \div .05 = 981,090 \text{ required number of automobiles per annum.}$$

Question II

A corporation issued 10-year first mortgage bonds on April 1, 1914, bearing 6% interest, payable semiannually

(April and October). The bonds provided for annual contributions to a sinking fund trustee, a trust company that allowed 2% compound interest. The bonds were sold at a premium and payment was received therefor on April 1, 1914. Show pro forma entries, as of the following dates: (a) April 1, 1914; (b) October 1, 1914; (c) April 1, 1915; (d) April 1, 1924. (New York, June, 1915.)

Answer

April 1, 1914

Cash	\$.....	
To First Mortgage Bonds Payable.....		\$.....
" Unamortized Premium on Debt.....		.....
Proceeds of 10-year first mortgage bonds bearing 6% interest, due 1924, interest payable semiannually—April and October.		

October 1, 1914

Interest on Bonds Payable.....	.....	
To Cash.....		.....
Semiannual interest payment due October 1, 1914.		

October 1, 1914

Unamortized Premium on Debt.....	.....	
To Amortization of Premium on Debt.....		.....
Proportion of premium applicable to this period credited to income.		

April 1, 1915

Interest on Bonds Payable.....	.....	
To Cash.....		.....
Semiannual interest payment due April 1, 1915.		

April 1, 1915

Unamortized Premium on Debt.....	.....	
To Amortization of Premium on Debt.....		
Proportion of premium applicable to this period credited to income.		

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April 1, 1915

Surplus	
To Sinking Fund Reserve.....	
Appropriation of surplus for sinking fund purposes.	

April 1, 1915

Sinking Fund Cash.....	.....
To Cash.....	.....
Annual contribution to trustee as provided in mortgage indenture.	

April 1, 1924

Unamortized Premium on Debt.....	.....
To Amortization of Premium on Debt.....	.....
Proportion of premium applicable to this period credited to income.	

April 1, 1924

Surplus .....	.....
To Sinking Fund Reserve.....	.....
Appropriation of surplus for sinking fund purposes.	

April 1, 1924

Sinking Fund Cash.....	.....
To Cash.....	.....
Annual contribution to trustee as provided in mortgage indenture.	

April 1, 1924

Sinking Fund Cash.....	.....
To Sinking Fund Reserve.....	.....
• Interest allowed by sinking fund trustee on deposits, as per agreement.	

April 1, 1924

First Mortgage Bonds Payable.....	.....
To Sinking Fund Cash.....	.....
Retirement of 10-year 6% first mortgage bonds, due April 1, 1924, and paid from sinking fund.	

April 1, 1924

Sinking Fund Reserve.....	.....
To Surplus.....	.....
To credit surplus with amount appropriated as sinking fund reserve during life of bonds, now retired and cancelled.	

April 1, 1924

Profit and Loss.....	.....
To Amortization of Premium on Debt.....	.....
To close into Profit and Loss credit balance applicable to this period.	

Question III

A company under its articles of incorporation is required to set aside a certain percentage of its profits at the close of each year to provide a sinking fund for retiring its bonded indebtedness when it matures.

(a) Give necessary entries to be made in the books setting up the reserve at the close of each year.

(b) Give entries required when the bonds are paid off at maturity.

(c) What relation has the sinking fund provision to depreciation? (Massachusetts, 1915.)

Answer

(a)

Profit and Loss (or Surplus; it is really im- material which).....	\$.....	
To Sinking Fund Reserve.....		\$.....

(b)

Bonds.....	.....	.....
To Cash.....	.....	.....
Sinking Fund Reserve.....	.....	
To Surplus.....	.....	.....

(c)

Depreciation of what? The indebtedness certainly does not depreciate. There is no inherent connection between a bond issue and a depreciable asset. The annual instalment of the sinking fund reserve is so adjusted that the reserve will equal the indebtedness at its maturity, and it has no connection with the depreciation of anything.

The proceeds of the bond issue may be invested in merchandise, in stocks (as often happens in the case of a holding company), or in fixed assets, such as plant; and in the last case, the investment may be more or less than the proceeds of the bond issue. If the exact proceeds are invested in fixed assets whose life is expected to terminate at the date of maturity of the bonds, the amount of sinking fund reserve at any time will be just the amount that should have been provided for depreciation; and when the maturity date arrives, the reserve should be rechristened "Reserve for Depreciation," instead of being closed into Surplus. This is, however, a mere coincidence. The fact that provision must be made for a sinking fund is no excuse for a failure to provide also for depreciation. The provision for depreciation is necessary and logical; the sinking fund reserve is unnecessary and really illogical, being based on the idea that the bonds are to be paid out of *profits* instead of from *assets*. The logical procedure, if it is desired to spread the payment uniformly over the life of the bonds, is to set aside each year the proper amount of assets, usually cash (which may, of course, be invested, so as not to be unproductive), and then use these assets to pay the debt when due. The entries for this method are simply:

Sinking Fund.....	\$.....	
To Cash.....		\$.....

for each annual instalment.

Bonds.....
 To Sinking Fund.....
when the bonds fall due.

The provision for depreciation must be made separately and is an entirely independent matter.

Both the fund and the reserve are sometimes carried simultaneously, having respectively debit and credit balances which are always equal. The fact that the reserve can only be closed into Surplus indicates the futility of taking it out of Surplus in the first place. It is sometimes claimed that it should be taken out of Surplus because if it were allowed to remain it might be used for dividends. The answer is that there is no reason, legal or moral, why it should not be used for dividends. The interests of the bondholders are entirely satisfied by the cash set aside for their benefit; and in considering the question of a dividend, the directors need have regard only for the *wisdom*, not the propriety, thereof.

Question IV

The Smith and Jones Manufacturing Company issued \$200,000 of first mortgage 50-year 5% sinking fund bonds which were marketed at 98½% and 1% commission, and expended the entire proceeds in the erection of their plant. The discount and commission were charged to Unamortized Debt Discount and Expense account, to be subsequently charged to Profit and Loss, proportionately, during the life of the bonds. Five years later, the company was enabled, owing to a disturbance in the financial market, to purchase \$50,000 of said bonds for sinking fund account at 95. Prepare the necessary journal entries to record correctly the above transactions on the books of the company. (New York, June, 1915.)

BOND AMORTIZATION, SINKING FUNDS

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Answer

X and Z.....	\$200,000.00	
To First Mortgage 50-Year Bonds.....		\$200,000.00
Face value of 200 first mortgage 50-year 5% sinking fund bonds issued by this company and placed in the hands of above bankers for sale, as authorized by board of directors June 28, 1915.		
Unamortized Debt Discount and Expense.....	5,000.00	
To X and Z.....		5,000.00
For account of discount allowed and com- mission paid on sale of 200 first mortgage 50-year bonds, as follows:		
Discount of 1½% on \$200,000..	\$3,000.00	
Commission of 1% on \$200,000..	2,000.00	
Cash	195,000.00	
To X and Z.....		195,000.00
Net proceeds of bond sale.		
Securities Purchased for Sinking Fund Pur- poses	50,000.00	
To Unamortized Debt Discount and Ex- pense		2,000.00
" Cash		48,000.00
Purchase of 50 first mortgage 50-year bonds of company for sinking fund purposes:		
Par value.....	\$50,000.00	
50 bonds @ 95.....	\$47,500.00	
1% commission.....	500.00	48,000.00
Difference (to be credited to Unamortized Debt Discount and Expense account).....	\$2,000.00	
First Mortgage 50-Year Bonds.....	50,000.00	
To Securities Purchased for Sinking Fund Purposes.....		50,000.00
Par value of 50 first mortgage 50-year sink- ing fund bonds, surrendered to the trustees for cancellation.		

Question V

The present value of an annuity of \$1 for four periods at 2% is \$3.80772870.

What is the value on January 1, 1914, of a 5% per annum bond issue of \$100,000, bought on a 4% per annum basis (semiannual coupons), due January 1, 1916?

Prepare amortization table as follows:

Date	Total Interest 2½%	Income 2%	Amortization	Book Value	Par \$100,000.00
Jan. 1, 1914					
July 1, 1914					
Jan. 1, 1915					
July 1, 1915					
Jan. 1, 1916					

Insert values under the various heads to the nearest cent. (Kansas and Missouri, 1915.)

Answer

These bonds yield an effective rate of 4% per annum. If the coupons were also 4%, the bonds would be worth exactly \$100,000. Since the coupons are 5%, the amounts to be valued (in order to find the excess value above \$100,000) are the present worths on a 4% basis (interest payable semiannually) of the difference between \$2,000 and \$2,500. In other words, we have to find the present worth of an annuity of \$500 for four periods at 2% per period. Using the data given in the first paragraph of the problem, we find this present worth to be \$1,903.86. This amount added to \$100,000 gives \$101,903.86 as the required value of the bonds on January 1, 1914.

The amortization table asked for is as follows:

Date	Total Coupon Receipts at 2½%	Income at 2%	Amorti- zation	Book Value	Par Value
Jan. 1, 1914...				\$101,903.86	\$100,000.00
July 1, 1914...	\$2,500.00	\$2,038.08	\$461.92	101,441.94	
Jan. 1, 1915...	2,500.00	2,028.84	471.16	100,970.78	
July 1, 1915...	2,500.00	2,019.42	480.58	100,490.20	
Jan. 1, 1916...	2,500.00	2,009.80	490.20	100,000.00	
Total.....	<u>\$10,000.00</u>	<u>\$8,096.14</u>	<u>\$1,903.86</u>		

BONDS, CONSTRUCTION

Question I

An electric light and power company has completed and is operating about one-half of its plant and is engaged in constructing and equipping the remainder.

Under these conditions how should the following expenditures be treated?

- (a) Additional equipment of power house
- (b) Interest on bonds
- (c) Labor for extending transmission lines
- (d) Officers' salaries
- (e) Organization expenses
- (f) Discount on bonds (Massachusetts, 1915)

Answer

- (a) Plant and equipment.
- (b) It depends on the use made of the proceeds of the

bond issue. Ordinarily, for an operating plant, bond interest is an expense; but if this refers to an issue of bonds for equipping the remainder of the plant, the interest thereon may be charged to cost of construction until this part of the plant is in operation.

(c) A capital expenditure to be charged to Poles, Lines, and Conduits, or some such title.

(d) Conservatively, an expense; but if certain officers are devoting part or all of their time to superintending the new construction, as is conceivable, a corresponding part or all of their salaries may be regarded as a capital expenditure, chargeable to Plant and Equipment.

(e) A company that is operating even half of its plant would seem to have been already organized; however, if any such expense can be attributed to the second half of the plant, it might be charged to Plant and Equipment.

(f) The answer is similar to that for (b). However, the tendency seems to be for the various public service commissions to require bond discount to be amortized in all cases, and not to be carried as an asset indefinitely, buried in a capital asset balance.

BONDS, MUNICIPAL

Question I

Union County undertakes two public improvements, viz., a road estimated to cost \$50,000 and a sewer estimated to cost \$40,000.

The work is to be paid for out of proceeds of county bonds falling due at various dates and redeemable from

assessments levied against property presumably benefited, to the amount of the actual cost of the work and incidental charges when these are determined.

Bonds to the above amounts are sold realizing a premium of 1 % which is added to the funds. The cost of the two undertakings when completed is \$50,000 and \$40,500 respectively, for which assessments are levied.

Assessments are collected as follows: for roads, \$30,200, with interest of \$1,310; for sewers, \$29,400, with interest of \$1,250. The interest in each case goes to the funds.

Road bonds, par value \$20,000, and sewer bonds, par value \$15,000, mature and are redeemed.

Prepare a trial balance of the transactions from which the status of the county debt and of funds and assessments at the conclusion of the above transaction could be ascertained. (New York, June, 1915.)

Answer

UNION COUNTY

TRIAL BALANCE AT

County Treasurer.....	\$27,560.00	
Cash (Road Fund).....	\$12,010.00	
Cash (Sewer Fund).....	15,550.00	
Uncollected Assessments.....	30,900.00	
Road Assessments.....	\$19,800.00	
Sewer Assessments.....	11,100.00	
Bonds Outstanding.....		\$55,000.00
Road Series.....	\$30,000.00	
Sewer Series.....	25,000.00	
Road Account, Unappropriated Balance.....		1,810.00
Sewer Account, Unappropriated Balance.....		1,650.00
	\$58,460.00	\$58,460.00

BONDS, PREMIUM AND DISCOUNT ON**Question I**

If a company sells its own bonds at a premium, is the premium received a legitimate profit of the company? (Ohio, 1915.)

Answer

No; the premium received is a reduction of the interest to be paid on the bonds and should be written off over the life of the bonds. If the company had issued its bonds bearing a lower rate of interest, the sales price of the bonds might have been at par or even at a discount. If at a discount, the interest cost to the company would have been increased over the nominal rate stated on the bonds.

Question II

Describe fully the method of handling premium and discount on bonds. (Maryland, December, 1915.)

Question III

Describe two different methods for writing off the premiums on bonds and state which in your opinion is the best method. (Louisiana, 1915.)

Question IV

Describe the method for adjusting the nominal interest return on a bond bought (a) at a premium; (b) at a discount. (Maryland, February, 1915.)

Answer to Questions II—IV

The effective rate of interest should be substituted at every interest period for the nominal rate received, whether the bond has been purchased at a premium or a discount. If purchased at a premium the effective rate will, of course, be lower than the nominal rate and the difference between the two rates should be used as a reduction of the premium paid. This process is called amortization.

If the bond is purchased at a discount, then the actual return on the money invested will be greater than the nominal rate of the bond, and the difference here should be added to the cost of the bond so that at maturity the book value of the bond will appear par. This process is called accumulation.

To illustrate the proper treatment of premium on bonds, take a \$100 bond bearing a nominal rate of 4% which has two years to run. Assume that it is purchased for \$101.93, thus yielding 3%. Interest is payable semiannually.

The first coupon received would be for \$2 at the end of the first six months. 3% on \$101.93 for six months is \$1.53. The amortization is therefore \$.47. The interest for the next six months is figured on the principal after writing off amortization for the first period. Therefore, you will find that 3% on \$101.46 for six months amounts to \$1.52. The amortization here is \$.48. Going further, you will find the amortization for each of the remaining two periods to be \$.49. The total of amortization would therefore be \$1.93, and the actual interest earned would amount to \$6.07 instead of \$8, the return under the nominal rate.

The entries would be as follows:

At purchase:

Bond	\$101.93	
To Cash.....		\$101.93

At end of six months :

Cash	2.00	
To Interest Earned.....		1.53
" Bond (Amortization).....		.47

At end of one year :

Cash	2.00	
To Interest Earned.....		1.52
" Bond (Amortization).....		.48

At end of eighteen months :

Cash	2.00	
To Interest Earned.....		1.51
" Bond (Amortization).....		.49

At end of two years :

Cash	2.00	
To Interest Earned.....		1.51
" Bond (Amortization).....		.49

At redemption :

Cash	100.00	
To Bond.....		100.00

Another method is to divide the total premium by the number of interest periods yet to run, and take the result obtained as the amortization for each period. In the above case the amount to be written off in each case would be 48 cents. The method is not scientific and would work a hardship to the holder of the bond if sold before maturity.

In practice, the most scientific method is to proceed from maturity back to the book value by determining the present worth at the different interest periods. In the case shown, the value at maturity being \$100 and the interest \$2, divide the sum of the two by 1.015, the effective rate for six months, and so proceed. In the illustration given, because of the small amounts involved, the results will be the same, but in larger amounts the amortization would be larger in earlier periods and interest earned would not be overstated.

Discount may be handled in any of the three methods stated, the variation being that the par value is reached by accumulation instead of amortization.

Question V

The Oak Furniture Company placed \$50,000 of its undivided earnings in the hands of a broker to invest in United States 4% bonds. The bonds were \$1,000 each and cost $101\frac{3}{8}$, commission $\frac{1}{8}$. Prepare detailed entries to record properly the transaction on the company's books. (New York, June, 1915.)

Answer

Broker	\$50,000.00	
To Cash.....		\$50,000.00
Cash placed in the hands of broker for investment in U. S. bonds.		
U. S. Bonds	49,000.00	
Premium on U. S. Bonds.....	735.00	
To Broker.....		49,735.00
To record the purchase of 49 U. S. 4% bonds by broker for our account.		
Premium $1\frac{3}{8}$	\$673.75	
Commission $\frac{1}{8}$	61.25	

BONDS, STREET RAILWAY

Question I

A banker wishes to purchase a large portion of the bond issue of a street railway corporation and employs an accountant to examine the accounts.

- (a) What is the information to be given to the banker?
- (b) What important accounting matters should be given special attention and how? (Massachusetts, 1915.)

Answer

(a) From the wording of the question, it would appear that the loan is not for the purpose of original construction but that the proceeds are to be used for current needs. Under these circumstances, the accountant should give the present values, or the values at the most recent date possible, of all the assets and liabilities, with sources of information or basis of estimate, in the case of each; the gross income and the net earnings for each of the past five years, if possible, showing specifically interest payments or any expenditures occasioned by lack of capital, and explaining any marked fluctuations.

(b) As the accounts kept are prescribed by state and national (if an interstate road) commissions, the accountant may not criticize their form; but he may comment on the amounts of renewals and replacements charged against earnings, and also on the amounts of depreciation, and of expenditures for repairs. The whole subject of the methods of handling the accounts of the fixed assets should be comprehensively reported upon. Other matters of importance, but perhaps not primarily within the province of the accountant, are: operating statistics of number of passengers, car-miles, population of territory served, leases of or to, or agreements with, other companies, etc., etc.

BORROWERS' STATEMENTS

Question I

What are the requirements of federal reserve banks in regard to financial statements of borrowers from member banks? (Massachusetts, 1915.)

Answer

While there has been considerable discussion of the proposition that all paper for use in federal reserve banks should be supported by certified statements of condition, the only requirements actually in force are those promulgated by the Federal Reserve Board in November, 1914, substantially as follows:

On and after January 15, 1915, no paper shall be purchased or discounted by federal reserve banks that does not bear on its face the certificate of the member bank offering it that it is eligible for rediscount under the regulations of the board, and that the member bank has been given a statement of condition signed and sworn to by the borrower, upon which the bank bases its certificate of eligibility.

While it would appear highly desirable that such statements of condition be verified, and the American Bankers' Association has gone on record in favor of such independent verification, it is not at present required.

BRANCH STORES

Question I

A retail branch store is charged at cost with goods sent from the main store, and credited with sales. At the end

of the fiscal period the branch account is charged with the gross profit in addition to the cost of goods. Analyze the account and show its component parts. (New York, January, 1915.)

Answer

For the purpose of answering this question a specific case is taken as follows:

The main store bills out to R Branch, \$20,000 of goods at cost. R Branch makes sales during the fiscal period of the whole of this amount for \$30,000.

The R Branch account would then show in the ledger of the main store as follows, it being assumed that half the sales were for cash and half for credit:

R BRANCH

Goods at Cost.....	\$20,000.00	By Sales Made—Cash	
Gross Profit on Sales..	10,000.00	Received	\$15,000.00
		Accounts Receivable...	15,000.00

It is further assumed that R Branch has a cash fund out of which it pays expenses. If not, the cash turned over to the main store would be proportionately less, and though the credit on the above account would remain the same, a part of it would come from an entry in the journal crediting the branch for the expenses it paid.

The entries on the main store book would be as follows:

As goods are sent out:

R Branch.....	\$20,000.00	
To Merchandise.....		\$20,000.00
For goods at cost sent to R Branch.		

As sales are made:

Cash	\$15,000.00	
Accounts Receivable.....	15,000.00	
To R Branch.....		\$30,000.00
Crediting the latter with the sales it makes (for which it has paid cash \$15,000) and billed out \$15,000 which will be collected by this store.		

At end of fiscal period:

R Branch.....	\$10,000.00	
To Merchandise.....		\$10,000.00
Gross profit on goods sold.		

Where branch store does not turn over all the cash:

R Branch Expense Account.....	\$.....	
To R Branch.....		\$.....
For expenses paid by latter out of cash sales before remitting.		

Question II

John B. Green has a chain of five retail grocery stores. Goods are sold to consumers for cash; and to small dealers on credit. Additional working capital is required. Three of Green's friends agree to furnish funds providing the business is incorporated. Such books as exist have been kept by single entry. The business is duly incorporated for an authorized capital of \$100,000, par value of shares \$100 each. It is agreed that Green shall turn over his business to the company as at July 1, 1914, on appraised values of physical properties; and values of all book accounts (assets and liabilities) as they shall be disclosed; and Green's net worth is to apply on his stock subscription of \$25,000. In addition, Green is to be allowed 25% of the net worth for "Good-Will." Other capital stock subscriptions are, respectively, A, \$30,000; B, \$25,000; C, \$20,000; and each is to

pay immediately in cash a proportionate amount on subscriptions which, altogether, shall aggregate 50% more than the value of capital stock issued to Green.

The Appraisal Company reports as follows:

Real Estate:

Store No. 1.....	\$4,000.00
Store No. 2.....	5,000.00

Buildings:	Reproductive Values	Sound Values
Store No. 1.....	\$3,000.00	\$2,000.00
Store No. 2.....	7,500.00	5,000.00

Furniture and Fixtures:

Stores	10,000.00	7,500.00
General Office.....	1,000.00	500.00
Stock Room.....	1,000.00	500.00

Automobiles (2).....	5,000.00	3,500.00
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Inventories (Merchandise):

In Store Room.....	14,000.00
In Storage (Butter and Eggs).....	5,000.00
In Stores.....	11,000.00
No. 1.....	\$2,300.00
No. 2.....	1,950.00
No. 3.....	3,135.00
No. 4.....	2,365.00
No. 5.....	1,250.00

The book accounts disclosed are as follows:

Cash at Bank.....	\$1,500.00
Cash—General Office Petty Cash.....	100.00
Cash—Stores	500.00
No. 1.....	\$140.00
No. 2.....	75.00
No. 3.....	160.00
No. 4.....	60.00
No. 5.....	65.00
Accounts Receivable—Dealers.....	\$2,600.00
Trade Creditors' Accounts.....	22,280.00
Accrued Wages and Salaries.....	795.00

BRANCH STORES

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Accrued Taxes.....	100.00
Unexpired Insurance.....	50.00
Mortgage on Real Estate and Buildings—dated July 1, 1913; principal payable in 5 years; interest at 6% per annum, payable semiannually.....	7,500.00
Notes Payable (Bank):	
Due 3 months from May 1, 1914 (6%).....	10,000.00
Due 3 months from June 1, 1914 (6%).....	5,000.00

Interest falling due on mortgage loan has not been paid. Interest on the \$10,000 note is payable at maturity. The \$5,000 note was discounted.

The following additional facts are shown on the books and records of the John B. Green Company at the close of the first month's business:

Merchandise Purchases (of which \$750 was returned)..... \$35,000.00
Stores' Sales as per Cash Register Totals:

Store No. 1.....	\$6,000.00
Store No. 2.....	3,500.00
Store No. 3.....	8,000.00
Store No. 4.....	5,000.00
Store No. 5.....	2,500.00

Sales to Dealers..... 5,000.00

Issues from General Stock (at cost):

Store No. 1.....	\$5,585.00
Store No. 2.....	2,850.00
Store No. 3.....	6,470.00
Store No. 4.....	4,210.00
Store No. 5.....	2,475.00

Cost of Goods Shipped to Dealers..... 4,545.00

Expenses of Stores:	Heat, Light, Cleaning, Ice, etc.			
	Clerks' Wages	Rents		
Store No. 1.....	\$200.00	\$65.00	\$25.00	\$290.00
Store No. 2.....	135.00	25.00	20.00	180.00
Store No. 3.....	235.00	75.00	35.00	345.00
Store No. 4.....	200.00	150.00	35.00	385.00
Store No. 5.....	135.00	100.00	35.00	270.00

Management and Office Salaries.....	385.00	
Store Room and Delivery Wages.....	265.00	
Rent of Office and Store Room.....	35.00	
Stationery and Office Supplies.....	40.00	
Postage	10.00	
Advertising	75.00	
In-Freight	50.00	
Heat, Light, and Janitor (Office).....	15.00	
Appraisal and Audit Fees.....	350.00	
Law and Organization Expenses.....	250.00	
Auto Up-Keep.....	90.00	
Telephone	40.00	
Debts of John B. Green not disclosed at date of turn-over:		
On Creditors' Accounts.....	\$675.00	
On Storage Charges (of which \$5 is for current month)	20.00	695.00

The stores' merchandise inventories at the end of the month amount to:

Store No. 1.....	\$2,650.00
Store No. 2.....	1,875.00
Store No. 3.....	2,920.00
Store No. 4.....	2,115.00
Store No. 5.....	940.00

The stores' cash funds are reduced to:

Store No. 1.....	\$100.00
Store No. 2.....	50.00
Store No. 3.....	100.00
Store No. 4.....	50.00
Store No. 5.....	50.00

Differences are found in the stores' cash funds at the close of the first month's business:

Store No. 1.....	short \$3.00
Store No. 2.....	over 1.00
Store No. 5.....	over 17.00

The general merchandise stock shows:

Spoiled goods, \$60; shortage in inventory at the end of the month, \$35.

The stores receive credit for spoiled goods:

Store No. 1.....	\$15.00
Store No. 2.....	10.00
Store No. 3.....	20.00
Store No. 4.....	15.00
Store No. 5.....	30.00

The upper floor of store No. 1 building is tenanted, and rentals at \$25 monthly, payable in advance, are found to be three months in arrears—of which \$50 is paid during July.

Insurance expires September 30, 1914.

All salaries and wages are payable one-half each on the 1st and 15th of the month.

Dealers have paid on their accounts \$4,200.

Trade creditors have been paid (of which \$340 is discount) \$40,000.

Depreciation charges (annual rates):

On Buildings, 5%.

On Furniture and Fixtures, 10%.

On Automobiles, 25%.

Part of store No. 2 building is used for the general office and store room.

You are asked to submit:

- (a) Opening entries on the books of the corporation (journal form with brief explanations), taking over the business of John B. Green and including payments on account of capital stock subscriptions.
- (b) General cash account for the month.
- (c) Profit and loss account for the month; showing also, in a clear and simple manner, the stores' operations with percentages of gross profit on cost. It is not necessary to prorate any of the general business expenses to the stores.

- (d) Comparative balance sheet as at July 1 and July 31, 1914.
- (e) A brief statement giving the grounds of your conclusions in explanation of the loss on goods sold in store No. 5. (Wisconsin, 1915.)

Answer to Question II

(a)

OPENING JOURNAL ENTRIES

Unissued Capital Stock.....	\$100,000.00	
To Capital Stock.....		\$100,000.00
For authorized capital stock issue of the John B. Green Company as per articles of incorporation.		
Capital Stock Subscriptions.....	100,000.00	
To Unissued Capital Stock.....		100,000.00
For subscriptions, viz.:		
John B. Green.....	\$25,000.00	
A	30,000.00	
B	25,000.00	
C	20,000.00	
Sundry Assets (as under).....	62,800.00	
To Vendors Account.....		62,800.00
For assets acquired from John B. Green:		
Real Estate.....	\$9,000.00	
Buildings	7,000.00	
Furniture and Fixtures.....	8,500.00	
Automobiles (2).....	3,500.00	
Merchandise Inventories:		
Store Room.....	14,000.00	
In Storage.....	5,000.00	
Stores	11,000.00	
Cash at Bank.....	1,500.00	
Cash—Office Fund.....	100.00	

BRANCH STORES

135

Cash—Stores	500.00
Accounts Receivable—Dealers.	2,600.00
Interest Paid in Advance.....	50.00
Unexpired Insurance.....	50.00

Vendors Account.....	46,000.00	
To Sundry Liabilities.....		46,000.00
For sundry liabilities taken over from John B. Green and assumed by the Company:		
Trade Creditors.....	\$22,280.00	
Wages	795.00	
Mortgage Payable.....	7,500.00	
Notes Payable.....	15,000.00	
Interest on Mortgage.....	225.00	
Interest on Note.....	100.00	
Accrued Taxes (estimated)...	100.00	

Good-Will	4,200.00	
To Vendors Account.....		4,200.00
For 25% of vendors' net equity in business turned over, as disclosed at date, being:		
Assets	\$62,800.00	
Liabilities	46,000.00	
Net Equity.....	\$16,800.00	
Good-will equals 25%, or.....	4,200.00	

Vendors Account.....	21,000.00	
To Capital Stock Subscriptions—John B. Green Account.....		21,000.00
To transfer former account balance and apply same to Subscription account in ac- cordance with terms of agreement.		

Cash	31,500.00	
To Capital Stock Subscriptions.....		31,500.00
John B. Green Account.....	\$21,000.00	
50% additional.....	10,500.00	
Required total payment.....	<u>\$31,500.00</u>	

Distributed as follows:

A, 42% of \$30,000.....	\$12,600.00
B, 42% of 25,000.....	10,500.00
C, 42% of 20,000.....	8,400.00
	<u>\$31,500.00</u>

Note:

Total subscriptions A, B, and C.. \$75,000.00

Required total payment..... 31,500.00

which is 42% of total subscriptions.

(b)

CASH ACCOUNT

Balance, July 1.....	\$1,500.00	Creditors	\$39,660.00
Stock Subscriptions....	31,500.00	Pay-Roll	1,572.50
Cash Sales.....	25,000.00	Interest on Mortgage...	225.00
Received from Dealers..	4,200.00	Postage	10.00
From Stores.....	150.00	Balance	20,947.50
Over-Cash	15.00		
Rental	50.00		
	<u>\$62,415.00</u>		<u>\$62,415.00</u>
Balance, August 1.....	\$20,947.50		

(c)
PROFIT AND LOSS ACCOUNT

Gross Sales as per		Cost of Goods Sold	Gross Profit or Loss	% Gross Profit or Loss	Stores' Expenses	Operating Profit or Loss
Cash						
Registers						
Stores						
No. 1.....	\$6,000.00	\$5,220.00	\$780.00	15%	\$290.00	\$490.00
No. 2.....	3,500.00	2,915.00	585.00	20	180.00	405.00
No. 3.....	8,000.00	6,665.00	1,335.00	20	345.00	990.00
No. 4.....	5,000.00	4,445.00	555.00	12.5	385.00	170.00
No. 5.....	2,500.00	2,755.00	(Loss 255.00)	(Loss 9%)	270.00	(Loss 525.00)
All Stores.....	\$25,000.00	\$22,000.00	\$3,000.00	13.6%	\$1,470.00	\$1,530.00
Dealers	5,000.00	4,545.00	455.00	10		455.00
Totals.....	\$30,000.00	\$26,545.00	\$3,455.00	13%	\$1,470.00	\$1,985.00

BRANCH STORES

PROFIT AND LOSS ACCOUNT—*Continued*

	Dr.	Cr.
Operating Profit—Brought down.....		\$1,985.00
Discounts on Purchases.....		340.00
Cash Average—Stores.....		15.00
Waste—Stores	\$90.00	
Waste—General Stock.....	60.00	
Inventory Shortage—General Stock.....	35.00	\$185.00
Salaries—Management	\$385.00	
Salaries—Store Room.....	265.00	650.00
Rent—Office and Store Room.....	\$35.00	
Heat, Light, and Janitor.....	15.00	
Stationery	40.00	
Postage	10.00	
Advertising	75.00	
In-Freight	50.00	
Law and Organization.....	250.00*	
Appraisal and Audit.....	350.00*	
Auto Up-Keep.....	90.00	
Telephone	40.00	955.00
Interest Charges—Loans.....		112.50
Insurance		16.67
Depreciation of Furniture and Fixtures... \$70.83		
Depreciation of Auto.....		72.91
Balance—Net Profit on Operations.....	277.09	
	<u>\$2,340.00</u>	<u>\$2,340.00</u>
Net Operating Profit—Brought down.....		\$277.09
Rentals from Buildings.....		150.00
Depreciation of Buildings.....	\$29.16	
Taxes (estimated).....	16.66	
Balance—Net Profit to Balance Sheet.....	381.27	
	<u>\$427.09</u>	<u>\$427.09</u>

*These may be written off over a period of, say, six months, \$100 monthly.

Stores' expenses comprise:

	Total	Salaries	Rents	Sundries
No. 1	\$290.00	\$200.00	\$65.00	\$25.00
No. 2	180.00	135.00	25.00	20.00
No. 3	345.00	235.00	75.00	35.00
No. 4	385.00	200.00	150.00	35.00
No. 5	270.00	135.00	100.00	35.00
	<u>\$1,470.00</u>	<u>\$905.00</u>	<u>\$415.00</u>	<u>\$150.00</u>

Journal entry:

Stores' Expenses.....	\$1,470.00	
To Wages Accrued.....		\$905.00
" Rent of Buildings.....		90.00
" Accounts Payable.....	\$150.00	
	<u>325.00</u>	475.00

(d)

Before the balance sheet for July 31 can be set up, the following adjustment entries must be made:

John Green	\$690.00	
Storage (Butter and Eggs).....	5.00	
To Accounts Payable.....		\$695.00
To record undisclosed liabilities.		
Cash	50.00	
To John Green.....		50.00
To record receipt of rent in arrears.		
John Green	160.00	
To Good-Will.....		160.00
To reduce Good-Will to 25% of John Green's net worth at time of incorporation.		
Merchandise	35,000.00	
To Accounts Payable.....		35,000.00
To record purchase of merchandise.		
Accounts Payable.....	750.00	
To Merchandise		750.00
To record return of merchandise.		

JOHN B. GREEN COMPANY
COMPARATIVE BALANCE SHEET

July 1, 1914		<i>Assets</i>		July 31, 1914
		Real Estate:		
	\$4,000.00	Store No. 1.....	\$4,000.00	
\$9,000.00	5,000.00	Store No. 2.....	5,000.00	\$9,000.00
		Buildings:		
	\$2,000.00	Store No. 1.....	\$2,000.00	
7,000.00	5,000.00	Store No. 2.....	5,000.00	7,000.00
4,200.00		Good-Will		4,040.00
		Unpaid Capital Stock Subscriptions:		
	\$4,000.00	John B. Green.....	\$4,800.00	
	17,400.00	A	17,400.00	
	14,500.00	B	14,500.00	
47,500.00	11,600.00	C	11,600.00	48,300.00
		Furniture and Fixtures:		
	\$7,500.00	Stores	\$7,500.00	
	500.00	General Office	500.00	
8,500.00	500.00	Store Room	500.00	8,500.00
3,500.00		Automobiles (2)		3,500.00
		Merchandise Stocks:		
	\$14,000.00	General Store Room....	\$22,020.00	
	5,000.00	Storage (Butter & Eggs)	5,005.00	
30,000.00	11,000.00	Stores	10,500.00	37,525.00
2,600.00		Accounts Receivable—Dealers.....		3,400.00
		Cash at Banks and in Hand:		
	\$33,000.00	At Banks	\$20,947.50	
	100.00	General Office Fund.....	100.00	
33,600.00	500.00	Stores' Funds	350.00	21,397.50
		Deferred Charges:		
	\$50.00	Interest Prepaid — Notes		
		Payable	\$25.00	
100.00	50.00	Unexpired Insurance....	33.33	58.33
		Accounts Receivable—Rents.....		25.00
<u>\$146,000.00</u>				<u>\$142,745.83</u>

Liabilities

July 1, 1914		July 31, 1914
\$100,000.00	Capital Stock—Authorized Issue....	\$100,000.00
	Unpaid Subscribed—per contra....	48,300.00
	Issued and Outstanding.....	<u>\$51,700.00</u>
7,500.00	Mortgage Payable (on Real Estate and Bldg.)	7,500.00
	Sundry Creditors:	
	\$15,000.00 Notes Payable.....	\$15,000.00
	22,280.00 Creditors' Accts. Payable	18,610.00
38,075.00	795.00 Wages and Salaries....	777.50
		<u>34,387.50</u>
	Accruals:	
	\$100.00 Interest on Notes Payable	\$150.00
	225.00 Interest on Mortgage..	37.50
425.00	100.00 Taxes (estimated).....	116.66
		<u>304.16</u>
	Depreciation Reserves	172.90
	Profit for month of July, 1914.....	381.27
<u>\$146,000.00</u>		<u>\$142,745.83</u>

(e)

The loss at store No. 5 may be accounted for:

1. By selling goods on credit instead of for cash.
2. By selling goods at less than cost.
3. By clerks' personal takings; or giving to relations or friends without charge.
4. By giving "over-weight."
5. By carelessness in general.

Adjustments to John B. Green's account:

Charge him with undisclosed liabilities...	\$690.00	
Credit him with rent due.....	50.00	\$640.00
Charge him with reduction of Good-Will account, 25% of \$640.....		160.00
Net increase.....		<u>\$800.00</u>

The differences found in the store's cash funds at the close of the first month's business might be held in a suspense or adjustment account until the end of the year.

As between sound and reproductive values, the former should be used. If reproductive values are used, they should be offset by a reserve for depreciation sufficient to bring the value of the assets down to sound value.

Question III

Supplementing the problem given on the financial affairs of the John B. Green Company, you are asked to submit an outline of a simple but effective accounting system for such corporations:

- (a) Submit list of books and records.
- (b) Submit captions of general ledger accounts, set up in trial balance form, and arranged under proper classification.
- (c) Submit ruled forms, showing columnar headings, for all books required, together with brief instructions relative to the use and purpose of each form. Also indicate, by graph or otherwise, relationship of the various books and records.
- (d) Give suggestions for the control of merchandise stocks in the stores, to have a reasonable assurance that cash has been received for all goods sold. (Wisconsin, 1915.)

Answer to Question III

(a) LIST OF BOOKS AND RECORDS:

- 1. General ledger, usual form.
- 2. General journal, usual form.

3. Columnar cash book.
4. Dealers ledger (loose-leaf), usual form.
5. Columnar book for record of stores' daily transactions.
6. General stock inventory book (loose-leaf).
7. Receiving book (double column journal ruled).
8. Wages book.
9. Voucher register (optional).
10. Creditors ledger (loose-leaf), usual form.
11. Price list.
12. Petty cash book.
13. Check book.
14. Issues sheets for daily requisitions.
15. Sales tickets for dealers, serially numbered.
16. Storage register.
17. Insurance register.
18. Notes payable register.

(b) GENERAL LEDGER ACCOUNTS:

Assets

Real Estate:

Store No 1.

Store No 2.

Buildings:

Store No 1.

Store No 2.

Good-Will

Unpaid Capital Stock Subscriptions:

John B. Green

A

B

C

Furniture and Fixtures:

Stores

General Office

Store Room

Automobiles**Merchandise Inventories**

General Store Room

Storage (Butter and Eggs)

Stores

Accounts Receivable**Cash:**

On Deposit

General Office Fund

Stores (list each one)

Liabilities**Mortgage Payable****Creditors:**

Notes Payable

Accounts Payable

Wages and Salaries**Accruals:**

Interest on Notes Payable

Interest on Mortgage

Taxes

Reserves:

Depreciation

Proprietorship**Capital Stock****Surplus**

Expenditures

Clerks' Wages (list by stores)
Rents (list by stores)
Sundry Expenses (list by stores)
Management and Office Salaries
Store Room and Delivery Wages
Rent of Office and Store Room
Stationery and Office Supplies
Postage
Advertising
In-Freight
Heat, Light, and Janitor (Office)
Appraisal and Audit Fees
Law and Organization Expenses
Auto Up-Keep
Telephone
Insurance
Waste:
 Stores (list each)
 General Stock
Inventory Adjustment (excess or shortage)
Interest
Discount Allowed by Us
Merchandise Purchases
Issues from General Stock (by stores)

Revenue

Merchandise Sales (separate accounts for sales
 through stores and sales to dealers)
Discount Allowed to Us
Cash Adjustment (over or under)
Rentals

(c) In answer to the third question, ruled forms with columnar headings are given on pages 149-158, while the diagram on page 148 shows the relationship of the various books and records. Brief instructions relative to the use and purpose of each form, called for in question (c), are given below.

Cash Book (Form 1)

Stores Collections. Enter cash sales and post to credit of proper cash sales account.

Discount Allowed by Us. Enter discounts allowed to customers and post monthly to debit of Discount Allowed by Us.

Dealers. Enter net cash plus discount (if any) and post to credit of Dealers account. Total monthly and credit Dealers' Accounts Receivable.

General Ledger. Enter credits to sundry accounts.

Bank Deposits. Title is self-explanatory.

Wages. Enter payments for wages and post to proper wages account. Detail will be found in wages book.

Discount Received by us. Enter discounts received and post monthly total to credit of Discount Receivable by Us.

Creditors. Enter net cash plus discount (if any) and post to debit of Creditors account in creditors ledger. Total posted monthly to debit of Accounts Payable.

General Ledger. Enter debits to sundry accounts.

Bank Withdrawals. Enter all checks.

Voucher Number. Title is self-explanatory.

Check Number. Title is self-explanatory.

General Stock Inventory Book (Form 2)

Keep a separate sheet for each commodity.

Enter the inventory on the first line in the "Received" column; at the end of each day enter in the proper columns

the amounts of this commodity received and issued during that day.

Show in the proper place the cost, sales price, gross profit, and percentage of gross profit.

At the end of the month total the "Received" and the "Issued" columns, deduct the waste and compare with physical inventory. Make the proper adjustment on the "Short" and "Over" line.

Cash Sales and Cash Remittances (Form 3)

Enter total cash sales of each store in "Sales" column, and do likewise with remittances. Enter total cash sales of all stores in "Amount" column and carry to cash book.

Petty Cash Book (Form 4)

Enter amount of disbursement in "Amount" column and in the proper distribution column. Post monthly totals as follows: total of "Amount" column to credit of Petty Cash account in general ledger, and total of other columns to debit of proper account in ledger.

Daily Stock Requisition (Form 5)

This form is self-explanatory.

Sales Ticket (Form 6)

This ticket is made out in duplicate and the carbon copy is held for stock record and office charge.

Insurance Register (Form 7)

This form is self-explanatory.

Storage Register (Form 8)

One sheet is made out for each item. The increases in stock, storage charges, etc., are entered under the column for charges, and all issues are credited. At the end of the month the balance is carried forward to the first day of the next month.

Spoiled and Returned Goods (Form 9)

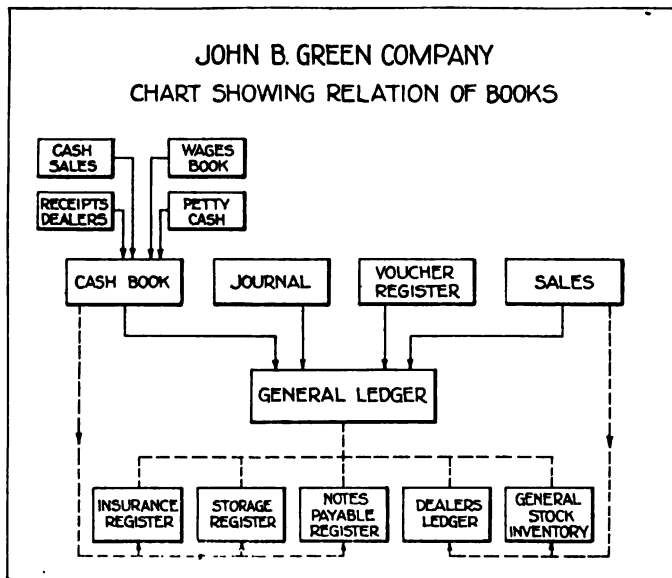
Enter the amount of spoiled or returned goods in the proper columns daily, and at the end of the month make proper adjustments to general stock and profit and loss accounts. In figuring inventories it may be necessary to estimate the share of each commodity.

Forms 10 and 11, illustrating the rulings for "Wages Book" and "Notes Payable Register," are self-explanatory.

Issues from General Stock (Form 12)

Enter daily the issues from stock and total periodically, charging stores with proper amounts.

A diagram showing the relationship between the various books and records is illustrated below.



JOHN B. GREEN COMPANY																
STOCK LIMIT _____				GENERAL STOCK INVENTORY BOOK										COMMODITY _____		
STAND. ORDER _____				JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		
Cost	Sales	Price	G.P.	RECEIVED	ISSUED	Cost	Sales	Price	G.P.	RECEIVED	ISSUED	Cost	Sales	Price	G.P.	
Inventory																
1																
2																
3																
4																
20																
30																
31																
Total																
Waste																
Short																
Over																
Inventory																

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[illegible]**Form 3**[illegible]**Form 4**

JOHN B. GREEN COMPANY

STORAGE REGISTER

ITEM _____

	REMARKS	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE	
		Balance	Charges Credits	Balance	Charges Credits	Balance	Charges Credits	Balance	Charges Credits	Balance	Charges Credits	Balance	Charges Credits
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
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18													
19													
20													
21													
22													
23													
24													
25													
26													
27													
28													
29													
30													
31													

Form 8

JOHN B. GREEN COMPANY														
SPOILED AND RETURNED GOODS														
MONTH _____														
DATE	STORE #1		STORE #2		STORE #3		STORE #4		STORE #5		DEALERS		GENERAL STOCK	
	Spoiled	Returned	Spoiled	Returned	Spoiled	Returned	Spoiled	Returned	Spoiled	Returned	Spoiled	Returned	Spoiled	Returned
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
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20														
21														
22														
23														
24														
25														
26														
27														
28														
29														
30														
31														
TOTAL														

Form 9

JOHN B. GREEN COMPANY							
ISSUES FROM GENERAL STOCK							
MONTH _____							
DATE	REQUISITION NUMBER	DEALERS	STORE #1	STORE #2	STORE #3	STORE #4	STORE #5
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
TOTAL							

Form 12

BUILDING CONTRACTS

Question I

A corporation executes contracts for building construction. When the buildings are ready for occupancy, there is \$100,000 due the general contractor on deferred instalments, payable in six months. The contractor offers to settle at once for \$90,000 cash, and his offer is accepted. Express the transaction by journal entries with brief explanations. (Wisconsin, 1915.)

Answer

Before the contractor's offer was made, the corporation's books should show:

Plant and Property.....	\$100,000.00	
To Accounts Payable on Building Contract		\$100,000.00

After accepting contractor's offer, we have, in part:

Accounts Payable on Building Contract.....	\$90,000.00	
To Cash.....		\$90,000.00

Inasmuch as it is customary to capitalize all incidental organization and construction *expenses*, e.g., bond interest paid during construction period, organization expenses of a new company, etc., it is consistent to apply incidental *gains* realized, in reduction of such intangible values. In no event should construction profits be included in the operating surplus account. Therefore, we have:

Accounts Payable on Building Contract.....	\$10,000.00	
To Plant and Property.....		\$10,000.00

It might be contended for the following reasons, that Plant and Property account should not be reduced by this unexpected saving:

- (a) Full contract price is the minimum value of the building, the price being determined by competitive bidding.
- (b) Cost of reproduction will equal total contract price.
- (c) Full contract value should be used for price-making purposes, e.g., for depreciation charges, etc.
- (d) Insurable values should be based on total contract price.
- (e) Net worth should be true value.
- (f) In case of sale, it is important that full contract price be shown on the ledger.

Under this contention, the \$10,000 saving should be credited to depreciation reserve.

CAPITAL STOCK

Question I

How is the value of capital stock determined? (Arkansas, 1915.)

Question II

State how you would arrive at the book value of the capital stock of a corporation, giving a detailed example and naming at least five different factors which would affect the price which a purchaser would pay for such stock. (Florida, 1915.)

Answer to Questions I and II

The value of capital stock is determined by dividing the total number of shares issued into the total equity between assets and liabilities, that is, into the sum of the Capital Stock Issued account plus the surplus and profit and loss.

In a corporation where the total authorized capital stock is issued, amounting to 1,000 shares at a par value of \$100, and where the accumulated true surplus equals \$50,000, the total value of the capital stock would be \$150,000, or \$150 per share. In the sale of a going concern, the good-will might be valued at a number of years' purchase price of the profits and so included in the assets, thus increasing the value of the capital stock.

The following five factors might be considered by a purchaser as affecting the price he would pay for the stock:

1. The assets might be overvalued or liabilities understated.
 2. Depreciation might have been inadequate.
 3. Accounts and notes subject to losses through bad debts might not be provided for.
 4. Profits may be transient or unsubstantial, or may be based on unusual conditions.
 5. Good-will might be valued too high.
-

Question III

Describe in detail your method of auditing completely the Capital Stock account.

If you find that some stock has been issued merely as collateral for a loan, how would you treat it on the books and in your report? (Florida, 1915.)

Answer

A schedule of outstanding certificates should be made from the stubs of the stock certificate book. Cancelled certificates should be accounted for and examined. The schedule of outstanding certificates should be checked in detail with the stock ledger, and the entries and balance should be compared with the Capital Stock account in the general ledger. In addition thereto, if the auditor obtains a certificate of the facts from the transfer agent, he has fulfilled his duty and might be said to have completely audited the Capital Stock account. Treasury Stock account should also be audited.

The practice of issuing capital stock as collateral for loans is not usually a good one, but, if it has been done and does not conflict with the laws of the state wherein the transaction took place, it would seem that the best practice

for the auditor would be to show the total stock outstanding, less the amount pledged as collateral, with a full explanation accompanying the item on the balance sheet. The stock pledged should be shown in the books as a debit to a separate account entitled "Stock in Hands of Blank as Security for Loan." A complete explanation of the transaction should appear in the auditor's report.

Question IV

A Massachusetts corporation temporarily in need of funds makes the following arrangement with three of its directors. They individually pledge their stock, par value \$15,000, \$10,000, and \$5,000, and receive loans of \$7,500, \$5,000, and \$2,500, with which they purchase new stock at par. It is their intention, when the loans are paid by the corporation, to return this \$15,000 worth of stock.

- (a) May this stock be purchased by the company?
- (b) What should be the entries on the books of the corporation? (Massachusetts, 1915.)

Answer

This question is not clear, because of the words "when the loans are paid by the corporation." The corporation has borrowed nothing, hence cannot pay any loans. It seems probable that the intention of the directors was to sell back to the corporation the \$15,000 worth of stock when their loans fell due, thus raising funds to meet their indebtedness. On this hypothesis, the answers are:

(a) Yes, if at the time of sale the corporation agreed to repurchase the stock by vote of the board of directors; provided, however, that the interests of the company's creditors are not harmed.

(b) The only entries on the company's books are those

for the sale and the subsequent purchase of the stock. It is to be assumed that the stock is authorized.

Cash	\$15,000.00	
To Capital Stock.....		\$15,000.00
Sales of capital stock for cash at par; to A, \$7,500; to B, \$5,000; to C, \$2,500.		
Treasury Stock.....	15,000.00	
To Cash.....		15,000.00
Purchase of shares for cash at par.		

Both entries are, of course, in the cash book, at different dates.

Question V

In auditing the Smith Manufacturing Company's books, you find in going through their minutes that a resolution was passed to give away one share of common stock with every share of preferred stock sold. At the end of their fiscal year, which period you are asked to audit, their books show as follows:

Real Estate and Buildings.....	\$83,872.88	
Cash on Hand in Bank.....	1,063.06	
Machinery and Tools.....	10,000.00	
Fixtures	452.18	
Unearned Insurance.....	160.94	
Office Supplies.....	397.86	
Manufactured Goods on Hand.....	10,000.00	
Accounts Receivable.....	16,840.62	
Capital Stock—Preferred.....		\$37,500.00
Bills Payable.....		13,100.00
Accounts Payable.....		14,601.43
Mortgage Loan on Real Estate.....		35,000.00
Profit and Loss Account.....		22,586.11
	\$122,787.54	\$122,787.54

What comments would you make to the Smith Manufacturing Company? (Arkansas, 1915.)

Answer

The auditor should direct the attention of the company to the fact that their books do not show a proper accountability for common capital stock issued. As nothing was received for the common stock, the resolution should be amended to show a complete transaction and to state some corresponding asset or value which could be shown on the books in lieu of common stock issued. The usual method is to issue the common stock for good-will and to have it donated back to the company. Then, as treasury stock there is no objection to issuing it as a bonus with preferred stock.

Question VI

The X Manufacturing Company holds as "Investments" a controlling interest in the capital stock of four affiliated companies; and one of the four companies (C Company) holds, in the same manner, a controlling interest in the capital stock of a fifth affiliated company (D Company).

All the companies are parties to a consolidation agreement whereby the X Manufacturing Company is to increase its capitalization; take over the affiliated companies and operate them as branch works; and exchange the outstanding old certificates of capital stock of all the companies for new certificates of capital stock (preferred and common, par value \$100 per share) of the reorganized X Manufacturing Company, in accordance with the terms of the consolidation agreement.

Balance sheets of the several companies at the date of merger are submitted hereunder. (See pages 166, 167.)

Certificates for shares of capital stock in the reorganized X Manufacturing Company are to be issued on the following terms:

	New Shares in Exchange for Each Share of Old Capital Stock		X Mfg. Co. Holds as Investments (Par Value)	
	Preferred	Common		
X Manufacturing Company.	1.22	.91	.....	shares
A Company	1.27	1.11	2,002	"
B Company	.21	.06	2,021	"
C Company	.81	.59	2,133	"
D Company (Common)....	.56	.75	.....	"
D Company (Preferred)...	1.00	....	.....	"
E Company	2.11	1.96	1,751	"
C Company holds shares of D Company			1,530	"

The par value of B Company shares is \$25 each. The par value of all other companies' shares is \$100 each.

At the date of merger, 100 shares of the E Company capital stock and 50 shares of the D Company preferred capital stock had not been deposited with the trustee for exchange. The D Company preferred capital stock carried 6% cumulative dividends; and these dividends had been "passed" for the preceding three years. With these exceptions, all other certificates had been deposited with the trustee for exchange.

Fractional shares of new capital stock are found to aggregate:

On Preferred.....	\$7,691.00
On Common.....	4,059.00

An option is given these stockholders to receive the amounts in cash or to pay the difference for additional shares at par value.

The reorganized X Manufacturing Company executes a first mortgage on its real estate for \$500,000. The bonds (6%) are sold at 95; part of the cash held by the trustee is

CLASSIFIED C. P. A. PROBLEMS

BALANCE SHEET OF THE SEVERAL COMPANIES AT DATE OF MERGER

<i>Assets</i>	X Mfg. Co.	A Co.	B Co.	C Co.	D Co.	E Co.
Real Estate	\$935,000.00	\$300,000.00	\$3,200.00	\$47,000.00	\$82,000.00	\$110,500.00
Property Account:						
Buildings, Structures, Machinery, Equipment, etc.	1,475,000.00	175,000.00	45,650.00	117,000.00	230,000.00	197,500.00
Good-Will, Patents, etc.	250,000.00	20,000.00	.....	115,000.00	150,000.00	175,000.00
Live Stock	35,000.00	30,000.00	.....	3,000.00	2,000.00	11,000.00
Office Fixtures	1,000.00	300.00	50.00	400.00	500.00	600.00
Investments in Corporate Stocks of Affiliated Companies	639,125.00	.....	.....	153,000.00	.....	.....
Fire Insurance Fund (Cash and Invest- ments)	15,000.00	.....	.....	.....	.....	.....
Cash at Banks and in Hand	26,000.00	3,000.00	300.00	6,000.00	4,300.00	9,000.00
Sundry Debtors—Customers	120,000.00	33,000.00	6,700.00	50,000.00	23,000.00	45,000.00
Due from Affiliated Companies	68,000.00	.....	.....	4,000.00	.....	.....
Inventories	310,000.00	35,000.00	1,100.00	15,000.00	35,000.00	115,000.00
Deferred Charges	30,000.00	1,700.00	.....	600.00	1,200.00	1,400.00
Organization Expenses (Merger)	25,000.00	.....	.....	.....	.....	.....
	<u>\$3,929,125.00</u>	<u>\$598,000.00</u>	<u>\$57,000.00</u>	<u>\$511,000.00</u>	<u>\$528,000.00</u>	<u>\$665,000.00</u>

CAPITAL STOCK

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Liabilities and Capital

Capital Stock—Common.....	\$3,000,000.00	\$400,000.00	\$100,000.00	\$350,000.00	\$300,000.00	\$350,000.00
Capital Stock—Preferred.....	.....	.....	.....	.....	100,000.00	.....
Bonds Payable.....	.....	.....	.....	.....	50,000.00	.....
Notes Payable.....	415,000.00	.....	.....	.....	.....	25,000.00
Current Liabilities and Accruals.....	164,185.00	11,500.00	.....	4,500.00	30,000.00	50,000.00
Dividend Payable.....	.....	.....	.....	.....	.....	17,500.00
Accrued Interest—Bonds.....	.....	.....	.....	.....	1,000.00	.....
Accrued Interest—Notes.....	3,775.00	.....	.....	.....	.....	250.00
Due X Manufacturing Co.....	.....	30,000.00	2,500.00	18,000.00	7,000.00	10,500.00
Due C Company.....	.....	.....	.....	.....	4,000.00	.....
Fire Insurance Reserve.....	98,000.00	.....	.....	.....	.....	.....
Surplus (or Deficit).....	248,165.00	156,500.00	(45,500.00)	138,500.00	36,000.00	211,750.00
	<u>\$3,929,125.00</u>	<u>\$598,000.00</u>	<u>\$57,000.00</u>	<u>\$511,000.00</u>	<u>\$528,000.00</u>	<u>\$665,000.00</u>

to be used to take up and retire the underlying bonds of D Co.; remainder of cash is available for working capital.

From the facts stated you are asked to submit:

- (a) Balance sheet of the reorganized X Manufacturing Company showing a capitalization of preferred and common stock consistent with requirements.
- (b) Trial balance of the general ledger of the reorganized X Manufacturing Company (using balance sheet accounts only) showing controlling accounts for current assets and liabilities of the branch works. Notes and bonds payable are to be carried on the home office books. (Wisconsin, 1915.)

Answer to Question VI

STATEMENT SHOWING CAPITALIZATION OF PREFERRED AND COMMON STOCK

	Capital Outstanding	New Shares for Old at		Total New Stock	
		Pfd.	Com.	Preferred	Common
A Company.....	\$400,000.00	1.27	1.11	\$508,000.00	\$444,000.00
B Company.....	100,000.00	.84	.24	84,000.00	24,000.00
C Company.....	350,000.00	.81	.59	283,500.00	206,500.00
D Co. (Common)	300,000.00	.56	.75	168,000.00	225,000.00
D Co. (Preferred)	100,000.00	1.00	....	100,000.00	.....
E Company.....	350,000.00	2.11	1.96	738,500.00	686,000.00
	<u>\$1,600,000.00</u>			<u>\$1,882,000.00</u>	<u>\$1,585,500.00</u>
Deduct: For In- vestment Hold- ings of Compa- nies.....				<u>924,609.00</u>	<u>818,141.00</u>
				<u>\$957,391.00</u>	<u>\$767,359.00</u>
X Mfg. Co.....	\$3,000,000.00	1.22	.91	3,660,000.00	2,730,000.00
Required Capital...	<u>\$4,600,000.00</u>			<u>\$4,617,391.00</u>	<u>\$3,497,359.00</u>

CAPITAL STOCK

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Less Fractional Shares.....	7,691.00	4,059.00
Required for Exchange.....	\$4,609,700.00	\$3,493,300.00
Reserve for Unacquired Shares Subsidiaries	26,100.00	19,600.00
Total New Capital Stock Issued.....	<u>\$4,583,600.00</u>	<u>\$3,473,700.00</u>

NOTES

Capital Issues and Reserves (New).....	\$4,609,700.00	\$3,493,300.00
Authorized Capital.....	5,000,000.00	4,000,000.00
Unissued Capital.....	<u>\$390,300.00</u>	<u>\$506,700.00</u>

Unacquired Shares' Reserve:

100 shares E Co.....	\$10,000.00	\$21,100.00	\$19,600.00
50 shares D Co. (Preferred).. <u>5,000.00</u>	<u>5,000.00</u>	<u>5,000.00</u>	<u>.....</u>
		<u>\$26,100.00</u>	<u>\$19,600.00</u>

Contingent Liability for three years'
unpaid cumulative dividends on un-
acquired shares (50) of D Co. pre-
ferred stock—6%\$900.00

Preferred (new) Issues and Reserves.....	\$4,609,700.00	
Common (new) Issues and Reserves.....	<u>3,493,300.00</u>	\$8,103,000.00

Capital of Old Companies.....	4,600,000.00
Increased Capitalization	<u>\$3,503,000.00</u>

INVESTMENT HOLDINGS OF SUBSIDIARIES

		Par Values	Values in New Shares	
		Old Stock	Preferred	Common
X Co. holds	of A Co.....	\$200,200.00	\$254,254.00	\$222,222.00
	of B Co.....	50,525.00	42,441.00	12,126.00
	of C Co.....	213,300.00	172,773.00	125,847.00
	of E Co.....	<u>175,100.00</u>	<u>369,461.00</u>	<u>343,196.00</u>
		\$639,125.00	\$838,929.00	\$703,391.00
C Co. holds of D Co.....		153,000.00	85,680.00	114,750.00
		<u>\$792,125.00</u>	<u>\$924,609.00</u>	<u>\$818,141.00</u>

WORKING SHEET OF X MANUFACTURING COMPANY

<i>Assets</i>			
	Totals	Additions	Eliminations
			Final
Real Estate.....	\$1,477,700.00	.....	\$1,477,700.00
Property Account.....	2,240,150.00	.....	2,240,150.00
Good-Will, Patents.....	710,000.00	(\$710,000.00)	4,204,705.00
Investment.....	792,125.00	(792,125.00)	.....
Organization Expense.....	25,000.00	(25,000.00)	.....
	(c) 11,750.00	.....	.....
	(d) 3,503,000.00	.....	.....
Adjustment Property Account.....	\$5,041,875.00	.....	.....
Discount on Bonds.....	.....	(e) \$25,000.00	25,000.00
Sinking Fund, Old Bonds.....	.....	(i) 51,000.00	51,000.00
Working Capital, Trustee.....	.....	(j) 424,000.00	424,000.00
Insurance Fund.....	15,000.00	.....	15,000.00
Live Stock.....	81,000.00	.....	81,000.00
Office Fixtures.....	2,850.00	.....	2,850.00
Due from Affiliated Companies.....	72,000.00	.....	.....
Cash.....	48,600.00	.....	48,600.00
Sundry Debtors.....	277,700.00	.....	277,700.00
Inventories.....	511,100.00	.....	511,100.00
Deferred Charges.....	34,900.00		34,900.00
	\$6,288,125.00	\$4,014,750.00	\$909,170.00
			\$9,393,705.00

CAPITAL STOCK

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Liabilities

	Totals	Additions	Eliminations	Final
Bonds Payable (old).....	\$50,000.00			\$50,000.00
Accrued Interest (old).....	1,000.00	.....	.....	1,000.00
Bonds Payable (new).....	.....	(h) \$500,000.00	.....	500,000.00
Due X Co.....	68,000.00	.....	(f) \$72,000.00	.....
Due C Co.....	4,000.00	.....	.....	.....
Current Liabilities.....	260,185.00	.....	.....	260,185.00
Dividend Payable.....	17,500.00	.....	(g) 8,755.00	8,745.00
Notes Payable.....	440,000.00	.....	.....	440,000.00
Accrued Interest Payable.....	4,025.00	.....	.....	4,025.00
Insurance Reserve.....	98,000.00	.....	(a) 83,000.00	15,000.00
Fractional Shares.....	.....	(c) 11,750.00	.....	11,750.00
Unacquired Shares Preferred.....	.....	.....	.....	26,100.00
Unacquired Shares Common.....	100,000.00	.....	.....	19,600.00
Capital Stock Preferred.....	4,500,000.00	3,503,000.00	.....	{ 4,583,600.00
Capital Stock Common.....	745,415.00	.....	(b) 745,415.00	{ 3,473,700.00
Surplus.....	.....	.....	.....	.....
	<u>\$6,288,125.00</u>	<u>\$4,014,750.00</u>	<u>\$909,170.00</u>	<u>\$9,393,705.00</u>
(a) Elimination of insurance reserve not covered by insurance fund.		(f) Elimination of intercompany accounts.		
(b) Elimination of total surplus of each company.		(g) Elimination of dividends due X Co.		
(c) Addition of fractional shares.		(h) New bond issue.		
(d) Increased capitalization.		(i) Sinking fund for bonds of D Co.		
(e) Discount on bonds sold.		(j) Balance of bond sale.		

X MANUFACTURING COMPANY

BALANCE SHEET

Assets

Real Estate.....		\$1,477,700.00
Property Account:		
Buildings, Structures, Machinery, Equip- ment, etc.....	\$2,240,150.00	
Good-Will, Patents, etc.....	4,204,705.00	6,444,855.00
Live Stock.....		81,000.00
Office Fixtures.....		2,850.00
Sinking Fund for Retirement of Bonds of D Company— Deposited with Trustee.....		51,000.00
Fire Insurance Fund.....		15,000.00
Cash at Banks and on Hand:		
Current Balances.....	\$48,600.00	
With Trustee from Sale of Bonds—Avail- able for Working Capital.....	424,000.00	472,600.00
Customers' Accounts.....		277,700.00
Inventories		511,100.00
Deferred Charges.....		34,900.00
Discount on Bonds Sold.....		25,000.00
		<u>\$9,393,705.00</u>

Liabilities

Capital Stock:		
Preferred—Authorized Issue.....	\$5,000,000.00	
Less Unissued.....	416,400.00	\$4,583,600.00
Common—Authorized Issue.....	\$4,000,000.00	
Less Unissued.....	526,300.00	3,473,700.00
Issued and Outstanding.....		\$8,057,300.00
Unissued Capital Stock Held in Trust pend- ing acquirement of outstanding shares of former subsidiaries:		
Preferred	\$26,100.00	
Common	19,600.00	45,700.00

CAPITAL STOCK

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Bonded Debt—First Mortgage on Real Estate.....	500,000.00	
Old Bonds Outstanding and Accrued Interest.....	51,000.00	
(Sinking Fund per contra)		
Fractional Share Account—Option Pending.....	11,750.00	
Notes Payable.....	\$440,000.00	
Current Liabilities.....	260,185.00	
Dividend Payable.....	8,745.00	708,930.00
Accrued Interest on Notes Payable.....	4,025.00	
Fire Insurance Reserve—per contra.....	15,000.00	
		<u>\$9,393,705.00</u>

Contingent Liability: Cumulative Dividends at 6 % per annum for 3 years on former D Company. Preferred Capital Stock Outstanding (50 shares), \$900.

X MANUFACTURING COMPANY

TRIAL BALANCE AFTER MERGER ENTRIES

<i>Debits</i>		<i>Credits</i>	
Unissued Capital Stock,		Preferred Capital	
Preferred	\$390,300.00	Stock	\$5,000,000.00
Unissued Capital Stock,		Common Capital	
Common	506,700.00	Stock	4,000,000.00
Unissued for Unac-		Preferred—Reserved.	26,100.00
quired Shares of		Common—Reserved ..	19,600.00
Subsidiaries:		Bonds Payable (new)	500,000.00
Preferred	26,100.00	Bonds Payable (old) ..	50,000.00
Common	19,600.00	Accrued Interest Pay-	
Real Estate.....	1,477,700.00	able (old).....	1,000.00
Property Account.....	2,240,150.00	Notes Payable.....	440,000.00
Good-Will, etc.....	4,204,705.00	Accrued Interest Pay-	
Sinking Fund.....	51,000.00	able	4,025.00
Live Stock.....	81,000.00	Fractional Shares....	11,750.00
Office Fixtures.....	2,850.00	Current Liabilities....	164,185.00
Insurance Fund.....	15,000.00	Dividends Payable	
A, Working Account..	61,200.00	(old)	8,745.00
B, " " ..	8,100.00	Insurance Reserve...	15,000.00
C, " " ..	67,100.00		
D, " " ..	33,500.00		

TRIAL BALANCE—*Continued*

E, Working Account..	120,400.00	
Cash at Bank and on Hand	26,000.00	
Working Capital (Trustee)	424,000.00	
Customers' Accounts..	120,000.00	
Inventories	310,000.00	
Discount on Bonds...	25,000.00	
Deferred Charges.....	30,000.00	
	<u>\$10,240,405.00</u>	<u>\$10,240,405.00</u>

Question VII

In its prospectus a corporation represents that it has an issue of "cumulative, non-voting, non-participating, six per cent preferred stock."

Give your interpretation of this expression. (Massachusetts, 1915.)

Answer

The holders of stock so described have no voice in the management of the company's affairs, but will receive 6% dividend per annum on the par value of their holdings, for the total period of their investment, before the holders of common stock may receive any dividends; but no more than 6% per annum in any event.

Such stockholders are practically in the rather weak position of having made loans to the company for the terms of its whole life, in return for no more than 6% interest; possibly less, in case the company does not earn enough to pay 6% on their loans.

CASH BOOK AUDIT**Question I**

A cashier disburses and receives cash and checks and has charge of the ledger accounts. He is suspected of irregularities. What auditing procedure would disclose his method of covering the shortage? (Nebraska and Ohio, 1915.) 

Answer

The auditing procedure which would result in the discovery of his supposed manipulation is the verification of the accounts receivable by communication with the customers. The usual method is to send out statements of account to all customers, together with a stamped envelope addressed to the auditor, requesting the customer to verify the balance as at that date and report differences. Another method, though not complete, is to check back cash receipts from customers from the accounts receivable ledger to the cash book. A further precaution is to examine all incoming mail.

Question II

In auditing the accounts of a cashier, you find that a duplicate payment has been made by check, which has been paid by the bank, but was not received by the creditor. The check is missing. Would you feel warranted in charging the cashier with a crime? Give reasons. (New York, June, 1915.)

Answer

Sections 148-149, Chapter II of the Code of Criminal Procedure (N. Y.) provides as follows:

"Section 148. When an information is laid before a magistrate of the commission of a crime, he must examine on oath the informant or prosecutor and any witnesses he may produce, and take their depositions in writing and cause them to be subscribed by the parties making them.

"Section 149. The depositions must set forth the facts stated by the prosecutor and his witnesses tending to establish the commission of the crime and *the guilt of the defendant.*"

(Depositions must set forth facts and not conclusions. 11 Abb. N.C. 122; 127 A.D. 278.)

As the facts given in the question in no way show that a crime was committed *by the cashier*, you would not be warranted in making any charge of crime against him.

Question III

State five methods whereby a bookkeeper also acting as cashier may dishonestly abstract funds of a company and still keep his books and accounts in balance. Specify a remedy for each of the five methods you enumerate. (Missouri and Kansas, 1915.)

Question IV

State five different methods which you ordinarily would detect by which a bookkeeper can abstract cash. Also two methods which you would not ordinarily detect. (Delaware, 1915.)

Answer to Questions III and IV

1. Abstract the cash as received and make no entry on the books of the receipt of cash or credit to the customer.

2. Abstract the cash as received and credit the customer for allowances on returned goods.

3. Abstract the cash and alter the cash book footings so that they show that a smaller amount was received or a larger amount paid out.

4. Abstract the cash as received without entry but post to the credit of the customer's account, substituting some fictitious debit in another customer's account in order to maintain the balance of the customers ledger.

5. Pay out cash to offset some invoice previously entered fraudulently, such invoice being charged to an expense account. The bookkeeper would obtain the cash paid out and enter the item on the credit side of the cash book.

6. Leave out the complete transaction of a sale and collection of cash therefor from the customer.

7. Abstract cash as received but substitute therefor cash subsequently coming in, with a continuation of the process to cover the original theft. This method is called overlapping.

The last two methods are difficult to detect without outside verification or examination of the mail or shipping records.

Remedies

1. Send statements to customers showing accounts unpaid.

2. Scrutinize allowances and get proprietor's authority thereon and examine receiving department records or transportation companies' books of shipping receipts for goods reported returned. Examine stock of merchandise or account.

3. Check cash book footings.

4. Check cash book postings back from ledger to cash book.

5. Check back purchase book postings to find origin.

6. Communicate with customers. Examine shipping record and merchandise stock accounts; examine receiving tickets and returned checks.

7. Examine receiving mail and communicate with customers, specifying dates.

To prevent the easy manipulation of accounts, have the ledgers posted by some other bookkeeper rather than the cashier, and enforce vacations for all employees.

Question V

What practical method would you adopt to detect "check marks" in a cash book, made in your absence by a suspected cashier? (New York, June, 1915.)

Answer

In order to detect "check marks" in a cash book, made in absence of the auditor, a list should be made before surrendering the book, of either the checked or the unchecked items covering the period under review. Upon returning or resuming the audit the list should be carefully checked back with the cash book.

Question VI

If you were not present to count the cash actually on hand at the date of the balance sheet, how would you afterwards verify its correctness? (Louisiana, 1915.)

Question VII

Give full particulars as to what you would consider necessary to be done in making an audit of cash (including petty cash) as of the date one month prior to that on which you are called upon to verify it. (Delaware, 1915.)

Answer to Questions VI and VII

Count the petty cash at the time of verification, and check back the receipts and payments to the date required. Reconcile the bank balances with the cash book as at the date of the balance sheet, and obtain an independent verification of the bank balances from the depositories as at the date required. Scrutinize all entries between the two dates and check the footings.

Question VIII

In making an audit, how would you verify the cash book balance of a company with deposits in New York and Boston? (Massachusetts, 1915.)

Answer

The question does not specify whether it is desired to verify the balance at a present date or at a past date, so we must answer both.

To verify the balance at a present date, count the cash in the office, get statements from the banks direct, and reconcile for checks outstanding, items in transit, etc. The book balance is thus proved except as to the items in the reconciliations—an exception that is too often overlooked. If the reconciliation of either bank includes an apparent

simple transfer of an amount from the other, care must be taken that the amount has been properly included in the other account; but if the same transaction appears in the reconciliation of both banks, it must be verified by a later examination. Only a second examination at a little later date will prove that a deposit said to be in transit to New York was not imaginary, and that there were no other checks in fact outstanding.

To verify the balance at a past date, verify the present balance as above, and then work back to the desired date by making use of the interim transactions, all of which, both receipts and payments, should be vouched as thoroughly as possible. Of course, the exact procedure will depend upon the accounting system in use, but the result in any case will be to arrive at bank reconciliation as of the desired date, which should be found on comparison to agree with the reconciliations already on record.

Question IX

A foreign agent of a life insurance company sends monthly the following data: a report showing his receipts and disbursements, with dates; vouchers supporting the disbursements; list of overdue premiums; a statement of his daily cash balances in bank, supported by a certificate from his bank as to his closing balances. How would you audit his report? (New York [June] and Oregon, 1915.)

Answer

If the report did not already show it in this form, it is suggested that the report of receipts and disbursements with dates and the statement of daily cash balances in bank be

combined so as to show the effect of the daily deposit of all receipts as follows:

Date of Month	Bank Balance A.M.	Receipts, i.e., Bank Total Deposits	Disbursements, Supported by Vouchers	Bank Balance P.M.
1.				
2.				
3.				
4.				
etc.				

The requirement that the daily deposit of all receipts be shown on the face of the report, would not prevent the agent from making a false report, but this could be detected by an examination of bank pass-book at a subsequent time.

The list of overdue premiums during previous months should be used to vouch the receipts in the current month, and unusual delays or excessive delinquencies would warrant direct inquiry and explanation.

Question X

The result of your count of the "Cash on Hand" at a large agency on January 1, 1912, discloses:

Bills		\$1,979.00	
Coin		484.19	
Cash items supported by properly signed vouchers:			
Jan. 14, 1908	Sub-agent Jones.....	\$200.00	
July 20, 1909	" Thomas.....	140.00	
Aug. 20, 1909	" Vincent.....	75.00	
Sept. 30, 1910	" Nelson.....	230.00	645.00
Cash balance as per general ledger.....		\$3,108.19	

Does this count complete your duty as an auditor? If you consider that further steps are necessary, state what you would do. (Louisiana and Oregon, 1915.)

Answer

In order to complete properly the audit of "Cash on Hand," it will be necessary for the auditor to assure himself that the funds stated to be in the hands of sub-agents did actually exist and to count and verify such funds. If impossible to do this, he should obtain a certificate from each agent stating that such cash was on hand. In stating the accounts it would seem proper to make two items of the total, showing cash in hands of sub-agents as separate from cash on hand.

CASH BOOK RULINGS**Question I**

Rule a cash book to provide for controlling accounts of debtors and creditors, also for discounts in settlement of both receivable and payable accounts; embrace also a method to include bank records. (Louisiana, 1915.)

Question II

Rule a form of cash book to provide for controlling accounts of debtors and creditors, for discounts in settlement of both receivable and payable accounts. What is the usual method of posting these figures? (Arkansas, 1915.)

Answer to Questions I and II

The usual method of posting controlling account items is to post the details to the individual accounts of both customers and creditors in the subsidiary ledgers throughout the month and to post the totals of the columns at the end

[illegible][illegible]

CHARITABLE ORGANIZATIONS

Question I

In the audit of the accounts of a charitable organization, what attitude should an auditor take with respect to certifying to the receipts of the society? (New York, January, 1915.)

Answer

An auditor is not justified in certifying to the receipts of a charitable organization. What he can do, and usually does, is to certify that receipts in accordance with the detailed list attached have been duly deposited by the society. It is customary for most charitable organizations to publish a complete list of their donations, in which case there is no need for an auditor to certify anything beyond the fact that such amounts were duly received by the society, for the list is open for all to see.

Where no list is published, the auditor must be careful not to certify the receipts. If he did, he would be responsible for any donations that had not found their way, through fraud of the officials, into the coffers of the society.

CHARTS, GRAPHIC

Question I

State your opinion on the use of diagrams, charts, or "graphs," giving at least three methods of showing diagrammatically the earnings and expenses of a mercantile or manufacturing concern.

State how you would prepare curves showing the monthly results accomplished, and what particular sets of figures you would use as conveying the most important information, using the following example :

Gross Sales.....	\$320,000	per annum
Cost of Goods Sold.....	260,000	" "
Expenses of Handling.....	30,000	" "
Expenses, Overhead.....	10,000	" "

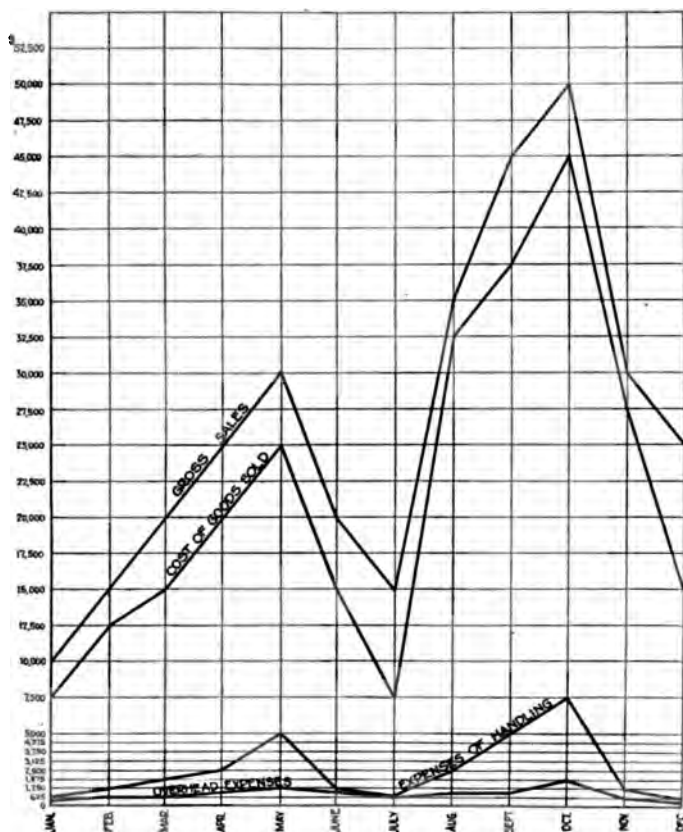
(Florida, 1915.)

Answer

Diagrams, charts, and graphs have been employed by accountants and business men in general, in many instances, to portray graphically particular phases of a business, mainly for the purpose of comparison. This method not only saves the reader much valuable time, but there is an additional advantage in that the *relation* of facts stands out much more clearly in a chart than in ordinary statements.

To the executive officer or manager of a wholesale, trading, or manufacturing concern, such charts may be a great help. The accountant in his periodical examinations takes a bird's-eye view of the entire business, and the executive officer desires to see the development over a long period of certain phases of the business and to compare its condition at a stated time with its condition at some previous date. In all such investigations and comparison a diagrammatic presentation of the facts is invaluable.

In order to prepare curves to show the monthly results accomplished in the example given, it is necessary to use assumed amounts to show the operations for each month. However, in each case the total for the year represents the amounts given in the problem. In the following chart the gross sales show a steady rise from January to May, then a downward trend until July, and again a marked increase to October; finally a sharp breake the last two months.



Graphic Chart of Gross Sales and Operating Expenses

In like manner the cost of goods sold is shown fluctuating similarly to the gross sales.

The expenses of handling show the same trend, not so marked, however, with a slight increase during the period when the sales were large.

The overhead expenses, it is assumed, were practically the same during each month, with a small proportionate increase in the months when business was good.

CONSOLIDATIONS

Question I

In examining several manufacturing properties with a view of consolidation, what general rules should govern the examinations? (New York, January, 1915.)

Question II

In making an examination for an intended purchaser of a business, what are the principal matters that should be looked into? (Maine, 1915.)

Question III

You are engaged to make a report on the proposed consolidation of three manufacturing companies that manufacture in part similar articles. What salient features, other than those disclosed by the examination, should you call attention to in your report? (Minnesota, 1915.)

Answer to Questions I—III

The report should not be limited to the information derived from the book accounts of the three companies, but should include all such information as will throw light on the proposed consolidation. Comparisons between periods, mention of dull or unusually favorable years, expiration of patents, royalties, franchises, and similar items, new construction, bearing of local legislation and comments on the manufacturing, business, and accounting methods in use by the different plants—all are points of valuable information which will be found very acceptable to the bankers or promoters of the consolidation. Secret processes of manufacture, unusual trade arrangements, and probable trend of

prices are also important. The auditor is not legally responsible for this information, nor is he legally bound to furnish it, but it is clearly his moral duty to do everything in his power to throw light on such questions as "Shall we consolidate?" "Will it be a more profitable arrangement?" and "How much is each company worth?"

The first general rule, which being analyzed further will give the method of proceeding, is: See that the accounting systems of the various concerns are uniform, so as to have the same basis on which to arrive at results. Also see that each concern has set up proper reserves for depreciation, based on practically the same system of calculation. Since they are manufacturing concerns, their methods of arriving at cost should be the same. If they are not, the accountant must reduce the results to the same basis. He must see that the apportionment of labor, factory expense, factory overhead, etc., is uniform. Then he can judge of profits from one uniform standpoint.

He must ascertain that only such items are included under the head of cost as properly belong. All income charges must be eliminated, since the main idea is to compare manufacturing items only.

Furthermore, the methods of inventory-taking, both of the fixed assets and of working assets, should be the same; the accounts receivable must be properly valued, and the accounts payable are to be properly shown.

An important point in connection with manufacturing concerns, is the amount of orders which the concern has on hand. Although the record of past periods may not show evidence of great prosperity, it is quite feasible that the business contracts for the coming year may point to a prosperous and profitable year. In carrying on his investigation the auditor should, therefore, be careful not to overlook this point.

Question IV

In a report upon a proposed amalgamation of two companies, state how you would treat the following points in arriving at the *earning power* of each concern. Give reasons for your treatment:

- (a) Anticipated profits on contracts in process.
- (b) Interest paid on borrowed capital.
- (c) Insurance of any description.
- (d) Wages paid general workmen.
- (e) Salaries paid officers and directors.
- (f) Depreciation of plant and equipment.
- (g) Bad debt reserves.
- (h) Repairs, renewals, and replacement of plant and equipment.
- (i) Taxes.
- (j) Audit and legal fees. (Wisconsin, 1915.)

Answer

(a) When work in process requires but a short time for completion, no anticipated profits should be considered; but when work is of long duration, such as shipbuilding, it is permissible to consider anticipated profits after making suitable provision for possible losses.

(b) If borrowings are proportionate, interest may be considered. If borrowings are not proportionate, interest should not be considered, or should be made proportionate.

(c) Should be considered if proportionate. If not proportionate, it should not be considered or should be made proportionate.

(d) Should be considered as it is a direct operating expense.

(e) Should be made proportionate.

(f) If considered, should be adjusted fairly. Only

reason for not considering would be the fact that some concerns would not write off the proportionate amount.

(g) Same as (f).

(h) Same as (f).

(i) Should be considered if plants are to be operated separately: if they are to be consolidated, allow tax rate of future location.

(j) Should not be considered unless proportionate.

CONTINGENT LIABILITIES

Question I

(a) State three kinds of contingent liabilities.

(b) How should they be shown on the balance sheet?
(Massachusetts, 1915.)

Answer

(a) Notes receivable discounted, not matured.

Accommodation indorsements.

Warranties and guarantees, of any sort.

(b) The first two kinds of contingent liability named under (a) might be shown on both sides of the balance sheet, offsetting each other; the third could not be shown, not being of a definite amount. In practice, however, such matters usually appear, not in the actual balance sheet figures, but in a footnote attached thereto.

CONTROLLING ACCOUNTS**Question I**

Define controlling accounts, and explain for what purpose the same are established. Give examples. (Kansas, Louisiana, and Missouri, 1915.)

Question II

What is a controlling account? Name those more commonly used. Illustrate and explain one in detail. (Michigan, December, 1915.)

Question III

(a) Define "Controlling Accounts" and give two illustrations of the use of such accounts.

(b) State the advantages of such accounts. (Nebraska, 1915.)

Question IV

(a) What is meant by controlling account? (b) What purpose does such account subserve? (c) Name two such accounts. (d) How do you reconcile a debit to a controlling account and another debit for the same amount to an individual creditor with the fundamental principle of double-entry bookkeeping? (Ohio, 1915.)

Question V

Describe a method of keeping accounts so that the aggregate sums due from customers and due to creditors can be known without preparing a schedule of the accounts of such customers and creditors, and so that an independent balance of the ledger, containing only the real, nominal, special,

and controlling accounts, exclusive of the individual accounts of customers and trade creditors, may be taken. (South Carolina, 1915.)

Answer to Questions I—V

Controlling accounts are accounts kept in the general ledger, the detail of which is kept in subsidiary ledgers. They were established for the purpose of obtaining, through a single account, the aggregate balance of the individual accounts kept in the subsidiary ledgers. In this way the detail work in connection with the taking of trial balances is greatly reduced.

In modern accounting the use of controlling accounts permits the balancing of the work of individual bookkeepers, thus localizing errors and eliminating the necessity for checking *all* the accounts to establish a balance.

The most commonly used controlling accounts are:

- Accounts Receivable or Customers Account
- Accounts Payable or Creditors Account
- Notes Receivable
- Notes Payable
- Capital Stock
- Material
- Investments

The fundamental principle of double-entry bookkeeping (a debit amount for every credit amount) is not upset by the use of controlling accounts, because the debit to the individual account in the subsidiary ledger is merely a bookkeeping expedient and forms no part of the double-entry system as such. The debit to the controlling account has its contra in a credit to Cash, Notes Payable, or other account in the general ledger.

The following explanation of the method of keeping

controlling accounts is taken from Dickinson's "Accounting Practice and Procedure" (pages 18, 19):

"The Subsidiary Ledger. As business increased in volume, so the opportunity for clerical error in carrying transactions through the various books and the consequent difficulty of obtaining an accurate trial balance also increased, and attempts were made at sectional balancing by which portions of the ledger might be proved and balanced without the necessity of dealing with the whole. This was applied firstly to the sales, which affected only a certain class of accounts. The ledger was divided into two portions, one of which contained only customers' accounts; the debits to these accounts came from the sales day-book, and the credits were obtained by employing a separate cash book or a separate column in the general cash book for all amounts received from customers, the totals of which were carried into the general cash book or "general" column of the cash book at fixed intervals. By making separate summaries of the sales day-book and the sales column in the cash book, and also by keeping a separate list of all discounts allowed on customers' accounts, all the debits and credits which affected the sales ledger could be put together and balanced with the totals of that ledger independently of any other part of the books. Then it was found simpler, and more conducive to accuracy, to take the totals of all the individual entries and put them through the journal, which had fallen into disuse, these totals being posted to an account in the main part of the ledger or general ledger with some such title as 'Customers Account' or 'Sales Ledger Account.'"

The process thus briefly described may be more clearly shown by an example:

1. A customers ledger contains accounts with 100 different individuals, showing on January 1 a number of debit balances, aggregating say \$1,500.

2. During the month of January sales are made to various customers, each of which is entered in the day-book and consequently posted to the debit of some account in the customers ledger. The day-book at the end of January is added up and the total found to be \$10,000.

3. During the month of January collections are made from customers, and entered individually, as received, in a book, and posted to the credit of the individual account in the customers ledger. As these postings are made a note is made in the cash book, against the cash receipt, of the amount of discount allowed. At the end of the month the cash and discount items are separately added up and found to amount to \$10,200 and \$300 respectively.

4. On January 31 the balances on the customers ledger are again taken off and found to amount to \$1,000, and it is desired to know whether or not this is the correct amount. The proof is as follows:

Balances on January 1.....		\$1,500.00
Add—Sales for month.....		10,000.00
Total.....		\$11,500.00
Deduct:		
Cash received.....	\$10,200.00	
Discount allowed.....	300.00	10,500.00
Balance should be and is.....		<u>\$1,000.00</u>

The following would be specimen journal entries for such a group of transactions:

Customers Account.....	\$10,000.00	
To Sales Account.....		\$10,000.00
For total of sales for the month as shown by sales day-book.		
Discount Allowed.....	300.00	
To Customers Account.....		300.00
For discounts allowed to customers during the		

month as per discount day-book (usually a separate memorandum column in sales cash book.)

Cash Account.....	10,300.00	
To Customers Account.....		10,300.00
For cash received from customers during the month.		

From the nature of these entries it will be seen that all debits and credits which have been posted individually to the accounts in the customers ledger have also been posted in total through the above entries to the Customers account in the general ledger, and that consequently the balance on the latter account must always equal the sum of all balances in the subsidiary ledger.

Controlling accounts as given above are now common in all large concerns and applied not merely to sales but to any group of accounts of sufficient magnitude to make it desirable. Their use necessitates a number of subsidiary columns in principal books, each one representing some separate controlling account or even a subdivision of such an account. The example just given, which involves nothing but simple arithmetic and common sense, is typical of all controlling accounts and no other principle is involved therein.

CORRECTING ENTRIES

Question I

When auditing the books of a company which are not in balance, the following errors are discovered:

1. A check drawn for \$110 is entered in the cash book

as a collection of \$100 and posted to the debit of the creditor's account as \$110.

2. A customer's credit memo of \$25 is included as a sale and posted to the credit of the customer's account as \$20.

3. The debit side of the cash book is underfooted \$100, and a check drawn for \$100 in payment of a creditor's account is not entered in the cash book.

4. Discounts received of \$250 are posted as discounts allowed.

5. Capital stock to the par value of \$5,000 was issued and charged to the president. \$2,500 of this stock was sold by him at par and the proceeds credited to the Capital Stock account. The balance of the issue, \$2,500, was later cancelled, the Capital Stock account charged and the president's account credited with that amount.

To correct the foregoing errors, prepare journal entries for accounts in the general ledger and subsidiary ledgers which are controlled by accounts in the general ledger. (Kansas and Missouri, 1915.)

Answer

1. The question is not quite clear but it is assumed that, through the use of controlling columns, the following entry was made in the cash book:

Cash	\$100.00	
To Customer's Control.....		\$100.00

The above entry was posted as a debit of \$110 to the correct individual creditor's account.

The original entry should have been:

Creditor's Control.....	\$110.00	
To Cash.....		\$110.00
(Individual Creditor, Dr. \$110.00)		

The correcting entry which will give the proper statement of the transaction on the general ledger is as follows :

Customer's Control.....	\$100.00	
Creditor's Control.....	110.00	
To Cash.....		\$210.00
(Individual Creditor, Dr. \$110.00)		

The item has been already correctly posted to the subsidiary ledger and need not be repeated.

2. The entry as made resulted as follows:

Customer's Control.....	\$20.00	
To Sales Account.....		\$20.00
(Individual Customer, Cr. \$20.00)		

The entry should have been :

Sales Account (Allowance).....	\$25.00	
To Customer's Control.....		\$25.00
(Individual Customer, Cr. \$25.00)		

The correcting entry would be :

Sales Account (Allowance).....	\$45.00	
To Customer's Control.....		\$45.00
(Individual Customer, Cr. \$5.00)		

3. The proper treatment of the error in footing is to draw a line through the erroneous amount and substitute the correct footing. At the same time, the posting to the cash account should be changed in the same manner.

The entry for the omitted item is given below:

Creditor's Control.....	\$100.00	
To Cash.....		\$100.00
(Individual Creditor, Dr. \$100.00)		

4. This is not an error in the original entry, but simply a mistake in posting and may be corrected as follows :

Adjustment (not posted).....	\$500.00	
To Discount Allowed.....		\$250.00
" Discount Earned.....		250.00

5. These transactions are recorded on the books as follows:

President	\$5,000.00	
To Capital Stock.....		\$5,000.00
Cash	2,500.00	
To Capital Stock.....		2,500.00
Capital Stock.....	2,500.00	
To President.....		2,500.00

The second entry being erroneous, the following should be made to correct the books:

Capital Stock.....	\$2,500.00	
To President's Account.....		\$2,500.00

COST ACCOUNTING

Question I

State four principal objects to be obtained by a modern cost system. (Massachusetts, 1915.)

Answer

"The functions performed by a cost system with respect to increasing the efficiency of a plant from an organization standpoint may be noted under the following heads:

"1. The records provide for a perpetual inventory, and also for the preparation of monthly statements showing the industrial and financial condition of a company.

"2. The cost of each article or class of product being separately shown, the management has invaluable data at hand to guide it in making changes of policy or methods.

"3. Comparative costs for different periods and under different conditions are obtainable.

"4. The records provide for following the material from the raw state until it is finished product, and for ascertaining the time, labor, and expense involved in its manufacture. In this way losses of material, wasted time, defective work, poor foremanship, and various other 'leaks' are detected.

"5. A cost system supplies the information necessary to standardize the work of a plant.

"The five items above mentioned are not to be regarded as a brief for the value of cost systems, but rather as an analysis showing the lines along which a cost system influences the factory organization." *

Question II

What are the constituent elements to be considered in fixing the selling price of a manufactured product? (Massachusetts, 1915.)

Answer

Briefly, the selling price is made up of the following components:

1. Materials	} Prime Cost	} Mfg. Cost	} Selling Cost	} Total Cost	} Selling Price
2. Direct Labor					
3. Manufacturing Burden					
4. Selling Burden					
5. General and Administrative Burden					
6. Net Profit					

It is not unusual to proceed direct from the manufacturing cost to the total cost, as little use can be made of the intermediate figure, selling cost.

*Nicholson's "Cost Accounting, Theory and Practice," page 22.

All possible costs and expenses can be distributed among the first five elements, though serious differences of opinion exist as to the proper classification of particular items.

Question III

State briefly the elements of cost appearing in the following ledger accounts. (a) Raw Materials, (b) Goods in Process, (c) Finished Goods. (New York, January, 1915.)

Answer

If we are to speak in the language of accounting principles, the "Raw Materials" account contains no element of cost. The credit side of this account shows merely the value of the asset transferred to another asset. The debit side of "Goods in Process" shows the components of a new asset, gathered from different sources. The credit side contains the total value of the asset which has been completed and has been transferred to the stock account "Finished Goods." The account "Finished Goods" contains an asset the value of which is made up of a portion of the total expenditure of the following items, as shown by "Goods in Process":

1. Preprocess cost of raw materials, representing cartage in, handling and storage charges.
2. Raw Materials.
3. Productive labor.
4. Superintendence.
5. Indirect labor.
6. Heat, light, and power.
7. Other factory and overhead items, depending upon the organization and the particular line of work done.

Hence, when the finished goods are sold, their cost is found by taking the difference between the debit side of the account "Finished Goods," and the credit side of that account and by subtracting from this balance the value of the remaining inventory.

Question IV

What in your opinion is the best method of distributing the overhead or indirect expenses of a manufacturing concern so as to apportion the same to the different articles manufactured?

Should interest charges be included in the cost of manufacture? (Louisiana, 1915.)

Answer

The best method of distributing overhead expense is the one which will most equitably burden each article of manufacture with its fair proportion of expense. It is, however, current knowledge among cost accountants that the best method in some plants will be entirely unfair in others, whether the percentage of labor or material, the man hour, machine hour, or percentage of sales method, or a combination of any of them is used. In answer to the question, the applicant would, of course, be obliged to decide for himself which of these methods he prefers. An opinion in this case would not reflect any remarkable qualifications on the part of the applicant, nor would it appear to disqualify him in the examination. It would seem wise to accompany the opinion with an illustration of the kind of business to which it applies.

Interest on capital invested should not be charged as a

part of the cost of product of a manufacturing plant, for the following reasons:

1. A fictitious unrealized profit is thereby created on the books, and the inventory of manufactured goods on hand and work in progress is overstated to that extent.

2. The inclusion of a fictitious constant element in the cost of production tends to obscure fluctuations in actual costs due to causes which may be corrected, thereby partially defeating the purpose for which cost accounts are kept.

3. A true rate of interest which capital invested should obtain is a matter of opinion, not possible of definite determination.

4. In the financing of industries the business world generally recognizes both interest and dividends as of the same character, as a return for the use of capital, and payable only out of the earnings of the business. The treatment of interest on investment as cost of operation runs counter to general business opinion and produces financial statements which are misleading to the average business man or banker.

The usual objects sought in charging interest on investment as manufacturing cost are:

First, to show the effect of different amounts of capital employed in the production of different articles or of the same article in different factories.

Second, to show the effect of the time element when lapse of time is a necessary part of the cost of production.

Both these objects can be attained through statistical records without charging interest on investments.

Engineers as a rule seem to favor the inclusion of interest on investments as a manufacturing cost, while accountants as a rule seem opposed to it.

Question V

Give seven methods of distributing indirect expenses which may be considered as standard. (Minnesota, 1915.)

Answer

1. Labor hour method (time).
 2. Machine hour method (time).
 3. Overhead day method (time).
 4. Wage hour method (labor cost).
 5. Prime cost (labor and material cost).
 6. Percentage (units in the job to total units manufactured).
 7. Production (total manufactured).
 8. Sales (percentage of number sold).
-

Question VI

What is the rule as to cost in taking inventory of finished stock of merchandise? Of unfinished stock? (Delaware, 1915.)

Question VII

In making up the annual balance sheet of a manufacturing business, what values should be stated in the inventory of (a) completed product on hand, (b) product in process, and (c) unconsumed materials, assuming that average conditions prevail with respect to market prices of material and labor? (Maine, 1915.)

Answer to Questions VI and VII

(a) The cost of "Finished Goods" is represented by the cost of (1) raw materials with any storage or transporta-

tion charges, (2) productive labor, superintendence and indirect labor, (3) heat, light, and power, and (4) such overhead outlay as may be incurred.

(b) "Product in Process" merely shows raw material with such increment of labor, superintendence, etc., as may have accrued up to the date of inventory.

(c) Unconsumed material would appear in the "Raw Material" account, at cost plus any transportation, storage, or other cost of handling.

Question VIII

A manufacturer produces one hundred different kinds of goods for sale and for each kind he has a formula or unit cost. Detailed records are kept of sales, returns, and allowances, name and quantity of each kind of goods sold. He wishes to know at the end of the fiscal year the net sales of each kind and the profit thereon.

(a) How would you ascertain the information desired?

(b) How would you prove the profits thus ascertained?
(Massachusetts, 1915.)

Answer

(a) The records being full and complete, the net sales of any one article are obtained by deducting from the gross sales of that article the corresponding returns and allowances, the computation being made for both quantity and value; and the net profit thereon is found by deducting from the value so found the product of the quantity by the (known) unit cost.

(b) The algebraic sum of the profits on all the articles, computed as in (a), should equal the actual profit shown by the general profit and loss account of the business.

Question IX

(a) From the following data, explain and illustrate four methods of distributing the indirect expenses of a factory to production:

	Dept. A	Dept. B	Dept. C
Materials Used.....	\$10,000.00	\$5,000.00	\$5,000.00
Productive Wages Paid.....	3,200.00	2,500.00	3,500.00
Productive Labor Hours.....	8,000.00	5,000.00	10,000.00
Indirect Expenses.....	4,000.00	2,500.00	2,800.00

The factory is supposed to run 2,400 hours a year.

(b) Apply the results obtained in (a) to the facts given below for job No. 10, in order to show the different total job costs obtained by each of the methods. Assume the material and labor (value and time) chargeable to job No. 10, to be as follows:

	Dept. A	Dept. B	Dept. C	Total
Material	\$1.00	\$2.00	\$1.00	\$4.00
Labor Value.....	1.60	1.50	1.05	4.15
Labor Hours.....	4	3	3	10

(Wisconsin, 1915.)

Answer

The following tables contain a complete answer to the above problem. It would be beyond the scope of this volume to attempt an explanation of the principles involved and students who are not familiar with the subject of distributing indirect expenses are referred to Nicholson's "Cost Accounting, Theory and Practice," Chapter V.

(a)

	Dept. A	Dept. B	Dept. C
(1) Productive Wages.....	$\frac{4,000}{3,200} = 125\%$	$\frac{2,500}{2,500} = 100\%$	$\frac{2,800}{3,500} = 80\%$

$$(2) \text{ Productive Labor Hours } \frac{4,000}{8,000} = 50\% \quad \frac{2,500}{5,000} = 50\% \quad \frac{2,800}{10,000} = 28\%$$

$$(3) \text{ Materials and Wages } \frac{4,000}{13,200} = 30.3\% \quad \frac{2,500}{7,500} = 33 \frac{1}{3}\% \quad \frac{2,800}{8,500} = 32.94\%$$

$$(4) \text{ Machine Hours } \frac{4,000}{2,400} = 1.66 \frac{2}{3}\% \quad \frac{2,500}{2,400} = 1.04 \frac{1}{6}\% \quad \frac{2,800}{2,400} = 1.16 \frac{2}{3}\%$$

	Dept. A	Dept. B	Dept. C	Total
(1) Productive Wages:				
Material	\$1.00	\$2.00	\$1.00	\$4.00
Labor	1.60	1.50	1.05	4.15
Burden	2.00	1.50	.84	4.34
Total Cost Job 10.....	\$4.60	\$5.00	\$2.89	\$12.49
(2) Productive Labor Hours:				
Material	\$1.00	\$2.00	\$1.00	\$4.00
Labor	1.60	1.50	1.05	4.15
Burden	2.00	1.50	.84	4.34
Total Cost Job 10.....	\$4.60	\$5.00	\$2.89	\$12.49
(3) Material and Wages:				
Material	\$1.00	\$2.00	\$1.00	\$4.00
Labor	1.60	1.50	1.05	4.15
Burden	.79	1.17	.68	2.64
Total Cost Job 10.....	\$3.39	\$4.67	\$2.73	\$10.79
(4) Machine Hours:				
Material	\$1.00	\$2.00	\$1.00	\$4.00
Labor	1.60	1.50	1.05	4.15
Burden	6.65	3.12	3.50	13.27
Total Cost Job 10.....	\$9.25	\$6.62	\$5.55	\$21.42

Question X

The main office of the Black Manufacturing Company is located in Milwaukee, but the factory is at Waukesha. The cost records are kept at the factory, but at the end of each month the necessary data is given the main office so that the proper accounts may be closed into the Manufacturing account, compiled on the general books as a section of the general revenue account. Both cost and general books are kept by double entry.

The following accounts having to do with manufacturing appear on the general books of the Black Manufacturing Company, March 31, 1915, before closing entries are made:

Inventory, Jobs in Progress, March 1.....	\$3,000.00
Inventory, Finished Goods, (not yet shipped), March 1.....	2,000.00
Inventory, Raw Material, March 1.....	5,000.00
Raw Material Purchased during month.....	10,000.00
Productive Labor.....	5,000.00
Rent	200.00
Heat	50.00
Light	25.00
Power	150.00
Repairs to Machinery.....	150.00
Sundry Factory Supplies.....	25.00
Superintendence	300.00
Unproductive Labor.....	150.00

The following items of expense should also be considered in building up the accounts on the general books for the month:

Taxes (month's share).....	\$20.00
Insurance (month's share).....	15.00
Depreciation on Plant (month's share).....	300.00
The accrued productive labor on March 31 amounts to.....	100.00

The cost records show the following data:

Material charged to Jobs in Progress, during month.....	\$11,000.00
Material charged to Finished Goods, during month.....	9,000.00
Labor charged to Jobs in Progress, during month.....	5,100.00
Labor charged to Finished Goods, during month.....	4,000.00
Indirect Expenses charged to Jobs in Progress, during month	1,475.00
Indirect Expense charged to Finished Goods, during month..	1,025.00
Jobs in Progress, balance March 1.....	3,000.00
Finished Goods, balance March 1.....	2,000.00
Manufacturing Account, balance March 1.....	5,000.00
Sales, goods shipped during March.....	20,000.00
Finished Goods, balance (goods not yet shipped) March 31..	1,500.00

(a) Construct the accounts as they would appear on the cost ledger.

(b) Close the cost ledger.

(c) Give the journal entry connecting the cost and the general books.

(d) Compile the manufacturing account on the general books, showing as the balance thereof the actual cost of goods sold during the month.

(e) Reconcile the profits as shown by the general books with those shown by the cost records. (Wisconsin, 1915.)

Answer to Question X

(a), (b)

COST LEDGER

MATERIAL

Manufacturing	\$11,000.00	Jobs in Progress.....	\$11,000.00
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LABOR

Manufacturing	\$5,100.00	Jobs in Progress.....	\$5,100.00
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INDIRECT EXPENSE

Manufacturing	\$1,475.00	Jobs in Progress.....	\$1,475.00
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JOBS IN PROGRESS

Material	\$11,000.00	Material to Finished Goods	\$9,000.00
Balance, March 1.....	3,000.00	Labor to Finished Goods	4,000.00
Labor	5,100.00	Indirect Expense to Finished Goods.....	1,025.00
Indirect Expense.....	1,475.00	Balance	6,550.00
	<u>\$20,575.00</u>		<u>\$20,575.00</u>
Balance	\$6,550.00		

SALES

Finished Goods and Profit	\$20,000.00	Manufacturing	\$20,000.00
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PROFIT

Manufacturing	\$5,475.00	Sales	\$5,475.00
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FINISHED GOODS

Jobs in Progress Material	\$9,000.00	Balance	\$1,500.00
Manufacturing	2,000.00	Cost of Goods Sold....	14,525.00
Jobs in Progress Labor.	4,000.00		
Jobs in Progress Ind. Expense	1,025.00		
	<u>\$16,025.00</u>		<u>\$16,025.00</u>
Balance	\$1,500.00		

(c), (d)

MANUFACTURING

Sales	\$20,000.00	Jobs in Progress, March 1	\$3,000.00
Balance	8,050.00	Finished Goods, March 1	2,000.00
		Material	11,000.00
		Labor	5,100.00
		Indirect Expense.....	1,475.00
		Profit	5,475.00
	<u>\$28,050.00</u>		<u>\$28,050.00</u>
		Balance	\$8,050.00

COST LEDGER BALANCE

Jobs in Progress, bal...	\$6,550.00	Manufacturing	\$8,050.00
Finished Goods.....	1,500.00		
	<u>\$8,050.00</u>		<u>\$8,050.00</u>

CONNECTING JOURNAL ENTRY

Jobs in Progress.....	\$6,550.00		
Finished Goods.....	1,500.00		
To Manufacturing.....			\$8,050.00

GENERAL BOOKSMANUFACTURING

Jobs in Progress, March		Jobs in Progress, March	
1	\$3,000.00	31	\$6,550.00
Finished Goods, March 1	2,000.00	Finished Goods, March	
Inventory:		31	1,500.00
Raw Material,		Cost of Goods Sold.....	14,435.00
Mar. 1.....	\$5,000		
Purchases	10,000		
	<u>\$15,000</u>		
Less Inventory,			
Mar. 31.....	4,000		
	<u>11,000.00</u>		

MANUFACTURING—Continued

Productive Labor.....	5,100.00	
Indirect Expense:		
Rent	\$200	
Heat	50	
Light	25	
Power	150	
Repairs to Mach..	150	
Sundry Fact. Sup.	25	
Superintendent ...	300	
Unprod. Labor....	150	
Taxes	20	
Insurance	15	
Depreciation on		
Plant	300	1,385.00
	<u>\$22,485.00</u>	<u>\$22,485.00</u>

(e)

Sales	\$20,000.00
Cost of Goods Sold.....	<u>14,435.00</u>
Profit on General Books.....	<u>\$5,565.00</u>
Profit on Cost Books.....	<u>5,475.00</u>
Excess Profits on Actual Cost.....	<u>\$90.00</u>
Credited to Indirect Expense on Cost Books.....	<u>\$1,475.00</u>
Charged to Indirect Expense on General Books.....	<u>1,385.00</u>
Excess of Estimated Over Actual Expense.....	<u>\$90.00</u>

Question XI

A company purchased several machines and, in order to install them to the best advantage, old machines which were to remain in use were moved to make room for them. The machines were large and had to be taken apart before they could be moved. To what account should the cost of moving be charged and why? (Pennsylvania, 1915.)

Answer

The expense of moving the old machines is entirely due to the purchase of the new machinery and as such it would seem quite proper to add the moving cost to the cost of new machines. If the old machines had been sufficient for production, the new machines would not have been necessary. If the old machines could not have been moved, the company would have had to build an addition to their plant for the new machines. As the old machines are to remain in use, the entire cost of installing the new machines constitutes an addition and should be capitalized.

COST OF CONSTRUCTION**Question I**

A corporation distributing gas to consumers in several contiguous cities, during the period of construction of pipe lines, charges all materials purchased to Construction account. When the lines are opened and operations begun, unused materials are conservatively inventoried at depreciated values and taken into Operating Stock account. When auditing the accounts would you approve or disapprove this treatment? State your reasons. (Wisconsin, 1915.)

Answer

Authorities differ as to the treatment. Conservative treatment would be to inventory such materials at the original purchase prices less depreciation. The depreciation would be left in the Construction account and therefore stand capitalized.

The materials might be inventoried at prevailing market prices for like goods, provided the market values are not higher than purchase values.

If the materials are simply "scrap" to be sold for what they will bring, then the amount realized should be credited to Construction account—the difference between original cost and realization being necessarily capitalized.

Question II

A manufacturing concern during a slack period used its own labor and material for the purpose of construction and charged the "Plant" account with the value of the work done at the price it would have cost if outsiders had been employed. What would you say about it in your report? (Michigan, December, 1915.)

Question III

A company used its own material and laborers' services in the erection of an addition to its own plant. These additions to Capital account were charged at market prices, the profit on the transaction being absorbed in current trading profits. Do you consider this method correct? Explain fully the principles involved. (Nebraska, 1915.)

Answer to Questions II and III

The method stated in the questions is not correct. The company is not in the building business and consequently should not merge such extraordinary income with operating profits. It is probably true, that if the concern had contracted with an outside party to build its addition to plant, it would have had to pay the current market prices; but it would seem more conservative to capitalize the addition

at actual cost rather than to take a book profit on its own operations. The method might be carried still further and a profit taken on repairs, but this would most certainly be considered bad practice. The addition should be valued at actual cost. The apparent loss in book value will be returned in the future by a smaller annual charge for depreciation.

Question IV

A concern needed an addition to its plant. Not having enough ready capital, they borrowed money and when the interest was paid it was charged to the "Plant" account on the theory that it was not an expense in the ordinary conduct of the business and should therefore not be charged to the regular interest and discount account but might with propriety be charged as a part of the cost of the addition. Is the theory sound? (Michigan, December, 1915.)

Answer

There is no reason why the interest on money borrowed entirely for construction purposes is not properly part of the cost of such construction. The plant produces no income until it is complete and in operating condition, and, as the question specifically states that the company borrowed money for the construction, it appears that their method is correct and the interest paid was one of the necessary elements of construction cost.

Question V

A company purchased land and on this land was a building which the company had to pull down in order to make the required use of the land. During the demolishing of

the building, a workman was killed. To what account should the compensation in respect of this accident be charged and why? (Pennsylvania, 1915.)

Answer

The compensation paid as a result of this accident could properly be charged to the cost of the new property.

It has become a general practice to include in the cost of construction all items properly arising out of, or relating to, the construction activities. For instance, the Interstate Commerce Commission allows as one of the costs of construction interest paid on capital during the period of construction.

If the company had contracted for the work of demolishing the building with an independent contractor, the charge of the contractor would include an allowance for liability insurance, which would, of course, find its way into the cost of the new property. If the company had been conservative and had provided for proper liability insurance to cover just such contingencies, the premium would, without question, be charged to the cost of construction.

DEFERRED CHARGES

Question I

How would you advise handling on the books, especially in regard to its effect on the Profit and Loss account, each of the following items:

1. Cost of organizing and promoting a new company.
2. Cost of acquiring a lease.
3. Cost of extensive advertising campaign for business in a new territory.
4. Cash received for partial fire loss, including some merchandise and some machinery.
5. Cash received by death of a member of the firm from insurance policy on his life in favor of the firm.* (Oregon, 1915.)

Answer

1. Should be capitalized as "Organization Expense" and written off over a period of years to Profit and Loss.

2. Added to the value of the lease and capitalized and written off to Profit and Loss over the life of the lease as additional rent.

3. Charged as "Advertising Paid" as a deferred charge and written off over the period in which the business resulting from such advertising occurs.

4. Credited to the asset accounts affected by the loss. The amount of the loss should be ascertained and the excess of the loss over the amount collected should be credited to

*"Firm" here should be "surviving partners," otherwise deceased partner's estate would be entitled to share in cash.

the asset accounts and charged to Profit and Loss as a special item designated as "Fire Loss."

5. Credited to a special surplus account for the benefit of surviving partners in place of the capital withdrawn to pay the estate the amount of the deceased partner's share. Usually, by agreement the amount received from the insurance company belongs to the *surviving* members and does not form a part of the assets of the *old* partnership. For this reason the deceased partner's estate is not entitled to any portion of such collected insurance. The amount collected is presumed to compensate the surviving members for the death of the deceased partner.

DEPRECIATION

Question I

What is depreciation? What items in a business are subject to depreciation? How is it ascertained? (Arkansas, 1915.)

Question II

State three important methods of calculating depreciation, briefly explaining each. (Delaware and Nebraska, 1915.)

Question III

Discuss briefly, depreciation, and the propriety and various methods of providing for same in the accounts. (Kansas and Missouri, 1915.)

Question IV

What is depreciation? Describe two methods of treating depreciation of machinery on both the books and the balance sheet. (Louisiana, 1915.)

Question V

(a) State theory of depreciation. (b) Explain several methods of computing the depreciation. (c) How would you show on the balance sheet a reserve for depreciation? (Ohio, 1915.)

Answer to Questions I—V

Depreciation is the shrinkage in value of an asset through use, the passing of time, decay, or obsolescence.

The following statement is taken from one of the decisions of the New York Court of Appeals:*

"Judicial notice may be taken of the fact that in the conduct of many industrial enterprises there is a constant deterioration of the plant which is not made good by ordinary repairs and which, of course, operates continually to lessen the value of the tangible property which it affects. The amount of this depreciation differs in different enterprises, but the annual rate is usually capable of estimate and proof by skilled witnesses. No corporation would be regarded as well conducted which did not make some provision for the necessity of ultimately replacing the property thus suffering deterioration; and we cannot see why an allowance for this purpose should not be made out of the gross earnings in order to ascertain the true earning capacity."

Depreciation is charged to the operating accounts and credited either directly to the asset accounts affected, or, preferably, to an account under the title "Reserve for

*People *ex rel* Jamaica Water Supply Co. v. Tax Com., 196 N. Y. 39, 57, 58.

Depreciation of " A plant record should be maintained, showing cost, depreciation, and depreciated value for each unit. When a unit is scrapped or sold, an adjustment is made between the actual depreciation and the book depreciation, and the item eliminated from both the plant and depreciation accounts.

Four common methods of figuring depreciation are:

1. The straight line method.
2. The fixed percentage on diminishing balance method.
3. The annuity method.
4. The production unit method.

1. In the straight line method the life of the asset is estimated and the cost of such asset less its scrap value is written off over such estimated life. A machine costing \$1,000 estimated to last ten years, with a scrap value of \$100, would be depreciated at the rate of \$90 per year.

2. In the fixed percentage on diminishing balance method it is customary to estimate a minimum life of the asset and then depreciate on the remaining balance after previous charges for depreciation have been deducted. In the case stated under No. 1, the depreciation the first year at 10% would be \$100; the second year it would be 10% on the depreciated balance, or \$90; and so on. At the end of ten years there would still be an undepreciated balance of about \$348, which would be either adjusted or further depreciated if the machine was still in use. Instead of estimating the rate of depreciation at 10% annually, such a rate may be determined upon as will exactly use up the cost of the machine during the period of its estimated life.

3. In the annuity method the plan is to estimate an amount which, if annually set aside at interest, would at the end of the life of the machine amount to the difference between cost and scrap values. This is a scientific method

which is more correct than the two previous methods but is not often used.

4. The production unit method contemplates an estimated life of a machine based on the amount of its production. If a given machine is designed to produce 1,000,000 units and costs \$1,000, the depreciation charge for each unit will be 1 mill. In a month showing a production of 200 units, the depreciation charge would be 20 cents on that machine.

A reserve for depreciation may be shown on the balance sheet as a deduction from the specific asset which it depreciates, or as a credit among the reserves on the liability side, thus showing in gross amounts both the asset and the reserve for depreciation. The first method of tying up the reserve to the asset is probably the most favored. Any asset which through use, the passing of time, decay, or obsolescence suffers a shrinkage in value, is subject to depreciation.

The following causes of depreciation are described by Professor M. E. Cooley :

"1. Depreciation Due to Wear and Tear and Exposure to the Elements. This is continuous. All elements have a wearing life varying with the element itself. No element can be completely worn out; it can be worn only to a point below which it becomes unsafe or no longer serves its original function. In practice the average condition of all elements must be maintained at a high percentage of the original cost if the property is to serve its purpose properly. This percentage varies from 75 per cent to 85 per cent of the cost new of the property. The difference between this percentage of from 75 to 85 and the original 100 is a depreciation which is inherent in the property and cannot be dispensed with. It must be met by a sinking fund, or its equivalent, otherwise this part of the original investment is lost.

"2. Depreciation Due to Accidents; a Sudden Deprecia-

tion. An engine or a boiler may be wrecked, and with it, other machinery. This might, and probably would, involve a considerable expense for repairs or replacement, besides possibly crippling the plant in part. Cars may collide or a car may drop through a bridge. A bridge itself may fall or be carried away by floods. A storm or a cyclone may work havoc, entailing costs in excess of those proper to be charged to ordinary maintenance of property.

"3. Depreciation Due to Inadequacy. Cars suitable in the past have already been superseded several times by larger and better cars. This has rendered the track, structure, and bridges inadequate, and as more power is required to propel the larger cars, the power plants have become inadequate. The public demand is largely responsible for this depreciation due to inadequacy.

"4. Depreciation Due to Obsolescence. This, while closely allied to the depreciation due to inadequacy, is different in that it embraces changes due to advance in the art. More efficient and effective machinery has appeared which must be submitted for the old to keep abreast of the times. For example in steam-engine practice the turbine has come into general use during the past five years and the art of steam turbines is at the beginning. Generators adapted to piston-engine practice are not adapted to steam-turbine practice and must be changed. Boilers adapted to piston-engine practice must be replaced to carry the higher pressures required. Condensers must also be changed to secure the better vacuum required to realize the full advantage of the steam turbine. Owing to the rapid disappearance of coal beds, the price of fuel must advance, and this presumably will before many years force the adoption of the gas producer and the producer gas engine. Water powers are wisely being developed, but to utilize them requires the scrapping of large parts of the machinery in use at present."

Question VI

What rule has the Interstate Commerce Commission made with respect to depreciation? (New York, January, 1915.)

Answer

The Interstate Commerce Commission has ruled that a certain amount of depreciation may be charged each year to the cost of operations, and that this must be set up as a "Reserve for Physical Depreciation" included on the credit side of the balance sheet under the caption "Unadjusted Credits."

All reserves according to the last form must be shown on the credit side. (New rulings, 1914.)

Question VII

Is depreciation an element in the cost of manufacturing? Give arguments for and against, if there are any, on both sides of the question. Use fictitious entries for all propositions stated. (Michigan, June, 1915.)

Answer

Because of the difficulty of accurately measuring depreciation, and because its existence is not immediately felt in increased expenditure, it is sometimes omitted, for a time at least, from the costs of manufacture. Moreover, it has been asserted that, owing to the uncertain rate at which it develops, and because it is frequently offset by appreciation due to standardization, good-will, etc., it ought not to be considered as a manufacturing cost. This view is quite wrong, and its adoption has undoubtedly caused many bank-

ruptcies through failure to charge all manufacturing costs to the proper accounts. Depreciation is as much a manufacturing cost as is fuel or labor.

Having adopted the principle of including depreciation among the costs of manufacture, it becomes necessary to determine the proper procedure of recording the facts in the books of account. Only suggestions can be made here as to the form the entries should take, since this will necessarily vary in different cases. Probably the manufacturing costs will be allocated on a monthly basis. If so, it will be necessary to make a journal entry monthly, charging "Depreciation—Manufacturing" and crediting "Reserve for Depreciation—Manufacturing." The phraseology may not be just like the above, but some wording must be chosen to distinguish depreciation chargeable to manufacturing from that chargeable in one of the other divisions of the income account. The entry would appear thus:

Depreciation—Manufacturing	\$.....	
To Reserve for Depreciation—Manufacturing		\$.....
Being the amount of current depreciation of machinery, tools, etc., chargeable to cost of manufacture.		

"Depreciation—Manufacturing" should next be credited, and the accounts in the cost ledger charged with their proper depreciation burden, which may be determined on one of several bases, just as other indirect expenses are allocated over job numbers. At the same time, "Manufacturing Account" in the general ledger should be charged with the total amount allocated to the various job numbers, since this account controls the cost ledger. The entry would be:

Manufacturing (general ledger).....	\$.....	
Order No.....	\$.....	
Order No.....	.....	
Order No.....	.....	
To Depreciation—Manufacturing.....		\$.....

To charge the various job numbers with their proportion of the depreciation burden, also to bring the total depreciation chargeable to manufacturing into the controlling "Manufacturing Account."

Question VIII

In your examination of the Automobile Delivery Truck account of a company, you find the following entries:

Debits

Jan. 1, 1914, Trucks 1, 2, 3, 4, at \$1,200.....	\$4,800.00
July 1, 1914, Truck 5.....	1,500.00
Aug. 1, 1914, Truck 6.....	1,500.00

Credits

Aug. 1, 1914, Truck 2.....	\$900.00
Sept. 1, 1914, Truck 4.....	750.00
Balance, September 1, 1914.....	\$6,150.00

The Reserve for Depreciation for Automobile Delivery Truck account stood credited on January 1, 1914, with \$1,800.

Upon analyzing the transactions represented by these items, you find the following facts:

(a) Truck 5 purchased July 1 replaced Truck 1. The portion of the reserve for depreciation accumulated on January 1 for Truck 1 amounted to \$900. Truck 5 was purchased on open account.

(b) Truck 2 was traded in for \$850 on the purchase of Truck 6 costing \$1,500. The difference was paid in cash. The reserve which had been accumulated for depreciation on Truck 2 on January 1, amounted to \$300.

(c) Truck 4 was totally destroyed in an accident Sep-

tember 1. The reserve for depreciation on this truck amounted on January 1 to \$300 and it was insured for \$750.

Assume the rate of depreciation to be 25% per year.

Give journal entries which would properly record the above facts and show the balances of all accounts affected, as of September 1, 1914. (Wisconsin, 1915.)

Answer to Question VIII

(a)

Operating Expense.....	\$150.00	
To Reserve for Depreciation on Truck 1....		\$150.00
Depreciation on Truck 1 for 6 months.		
Auto Delivery Truck 5.....	1,500.00	
Reserve for Depreciation on Truck 1.....	1,050.00	
Surplus	150.00	
To Auto Delivery Truck 1.....		1,200.00
" Accounts Payable.....		1,500.00
Replacement of Truck 1 with Truck 5.		

(b)

Operating Expense.....	\$175.00	
To Reserve for Depreciation on Truck 2....		\$175.00
Depreciation on Truck 2 for 7 months.		
Auto Delivery Truck 6.....	1,500.00	
Reserve for Depreciation on Truck 2.....	475.00	
To Auto Delivery Truck 2.....		1,200.00
" Cash		65.00
" Surplus		125.00
Replacement of Truck 2 by Truck 6.		

(c)

Operating Expense.....	\$200.00	
To Reserve for Depreciation on Truck 4....		\$200.00
Depreciation on Truck 4 for 8 months.		

Reserve for Depreciation on Truck 4.....	500.00	
To Auto Delivery Truck 4.....		500.00
To close Depreciation account into asset.		
Insurance Adjustment.....	700.00	
To Auto Delivery Truck 4.....		700.00
To close Truck acct. into insurance adjustment.		
Insurance Company.....	750.00	
To Insurance Adjustment.....		750.00
To record insurance.		
Insurance Adjustment.....	50.00	
To Surplus.....		50.00
To transfer gain on fire.		
Operating Expense.....	293.75	
To Reserve for Depreciation.....		293.75
Depreciation Truck 3, 8 mo.....	\$200.00	
Depreciation Truck 5, 2 mo.....	62.50	
Depreciation Truck 6, 1 mo.....	31.25	

AUTO DELIVERY TRUCKS

Jan. 1 Truck 1, 2, 3, 4..	\$4,800.00	July 1 Truck 1.....	\$1,200.00
July 1 Truck 5.....	1,500.00	Aug. 1 Truck 2.....	1,200.00
Aug. 1 Truck 6.....	1,500.00	Sept. 1 Truck 4.....	500.00
		Sept. 1 Truck 4.....	700.00
		Balance	4,200.00
	\$7,800.00		\$7,800.00
Sept. 1 Balance	\$4,200.00		

RESERVE FOR DEPRECIATION

July 1 Truck 1.....	\$1,050.00	Jan. 1.....	\$1,800.00
Aug. 1 Truck 2.....	475.00	July 1 Truck 1.....	150.00
Sept. 1 Truck 4.....	500.00	Aug. 1 Truck 2.....	175.00
Balance	300.00	Sept. 1 Truck 4.....	200.00
	\$2,325.00		\$2,325.00
		Sept. 1 Balance.....	\$300.00

OPERATING EXPENSE

July 1	Depr. on Truck 1	\$150.00
Aug. 1	" " " 2	175.00
Sept. 1	" " " 3	200.00
Sept. 1	" " " 5	62.50
Sept. 1	" " " 6	31.25
Sept. 1	" " " 4	200.00

SURPLUS

July 1	Loss on Truck 1..	\$150.00	Aug. 1	Gain on Truck 2	\$125.00
			Sept. 1	" " Truck 4	50.00

ACCOUNTS PAYABLE

July 1	Truck 5.....	\$1,500.00
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INSURANCE ADJUSTMENT

Sept. 1	Truck 4.....	\$700.00	Sept. 1	Truck 4.....	\$750.00
Sept. 1	Surplus	50.00			

CASH

Aug. 1	Truck 6.....	\$65.00
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INSURANCE COMPANY

Sept. 1	Truck 4.....	\$750.00
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Question IX

A corporation makes a practice of charging to expense and carrying to depreciation reserve account every half year, a certain percentage of the book value of its plant and machinery.

Should repairs and renewals be charged to Profit and Loss, or can they properly be charged to depreciation reserve accounts?

Give reasons in full. (Massachusetts, 1915.)

Answer

If the provision for depreciation is calculated by the usual methods, taking into account only the cost, the scrap value, and the term of life of the item, it is clear that any repairs charged against the depreciation reserve account would result in an insufficient reserve to cover the loss at the end of life. Hence, all repairs and renewals of parts should be charged to Profit and Loss, as well as the annual instalment of depreciation reserve.

On the other hand, the reserve is expressly intended to provide for renewals of whole machines. It is not usual to charge the renewals themselves to the reserve account, but to Machinery (or whatever the proper asset account may be), making also an entry to the credit of Machinery and to the debit of reserve for the book value (cost less scrap value) of the old machine that is replaced.

The depreciation reserve might, of course, be so computed as to include cost of repairs; the desire being to spread the total cost of the machine, including all necessary repairs, uniformly over the life of the machine. In some cases this is highly desirable, if not indeed necessary; and if the reserve has been computed on this basis, both repairs and renewals should be charged to the reserve.

Question X

From the data given below, state clearly and explain at least three different methods of arriving at the amount to

charge annually for the depreciation of any one or all of the following items :

	Value	Estimated Life	Scrap Value
Buildings	\$50,000.00	50 years	\$1,000.00
Machinery	20,000.00	20 "	2,000.00
Tools	5,000.00	5 "	100.00
Patterns	10,000.00	3 "	100.00

(Wisconsin, 1915.)

Answer

1. Fixed Proportion Method :

Buildings, 1/50 of \$49,000 equals \$980 yearly	
Machinery, 1/20 " 18,000 " 900 "	
Tools, 1/5 " 4,900 " 980 "	
Patterns, 1/3 " 9,900 " 3,300 "	

\$6,160 annual charge

2. Sum of Year Digit Method (illustrated by Tools account) :

5/15 of \$4,900 equals \$1,633.33 charge first year	
4/15 " 4,900 " 1,306.67 " second "	
3/15 " 4,900 " 980.00 " third "	
2/15 " 4,900 " 653.33 " fourth "	
1/15 " 4,900 " 326.67 " fifth "	

\$4,900.00 total charge

3. Composite Life Method :

Value	Life	Scrap Value	Depreciation	Times Replaced	Total Expenditure in 50 Yrs.	Dollar Years
\$50,000	50	\$1,000	\$49,000	1	\$49,000	\$2,450,000
20,000	20	2,000	18,000	2.5	45,000	900,000
5,000	5	100	4,900	10	49,000	245,000
10,000	3	100	9,900	16⅔	165,000	495,000
\$85,000					\$308,000	\$4,090,000

$308,000 \div 4,090,000$ equals $\frac{1}{13.28}$, composite life, or 7.53%.

Reserve for depreciation would therefore be 7.53% of \$85,000 = \$6,400.50 annual charge.

The composite life method contemplates the determination of one rate which may be applied to the total asset account and its reduction to scrap value in an average number of years.

Question XI

(a) What is required scientifically to calculate the provision for depreciation of any concern with different classes of fixed assets?

(b) State three methods by which the amount required for depreciation may be computed. (Massachusetts, 1915.)

Answer

(a) The fixed assets must be separated into classes having different terms of life or rates of depreciation. It is necessary to know for each item of property subject to depreciation, the original cost, the estimated life, and the scrap value at the end of that life. If the asset has been used, the present value shown by appraisal, the estimated further life, and the final scrap value must be known. These components must be known, or estimated, for each separate class of fixed assets.

(b) 1. The straight line method, in which the difference between cost and scrap value is divided by the number of years of life, and the quotient is the (constant) amount of depreciation for each year.

2. The method of fixed percentage on diminishing bal-

ances, in which a percentage rate is ascertained which, when applied each year to the balance remaining after the similar deduction for the preceding year, will reduce the balance to the scrap value at the end of life of the asset.

3. The annuity method, in which a constant sum is set aside each year, so calculated that, compounded at an assumed rate of interest, it will accumulate, in the life of the asset, to the difference between cost and scrap value.

DISCOUNTS

Question I

Merchandise has been purchased on credit subject to usual discounts and not yet paid for. How should it be valued in an inventory and why? (Massachusetts, 1915.)

Answer

It is not clear what is meant by "usual discounts." In some lines, trade discounts are customary. If the above question includes trade discounts, naturally the merchandise on hand should be valued at net cost after discount. If only cash discount is meant, the matter is hardly worth taking into account, as the discount of 1% or 2% will amount to little, and the only error caused is to transfer a certain small amount of profit from the succeeding period into the preceding one.

Of course, the endeavor should be to price the inventory at what the goods actually cost when paid for, that is, net less all discounts; but small cash discounts can hardly be regarded as of very great importance either way.

DIVIDENDS

Question I

The preferred stock of a corporation is entitled to cumulative dividends of 7% per year; for the past ten years the company has paid dividends on this stock at the rate of 5% per year.

How should the arrears of dividends appear on the company's balance sheet? (Ohio and Nebraska, 1915.)

Question II

In a case where the preferred shares of a company are issued under a provision that the annual dividends to which they shall be entitled shall be "cumulative," would you consider it necessary to show any arrears of dividends as a liability upon the balance sheet, or how would you deal with it? (Oregon and Maine, 1915.)

Question III

A corporation's capitalization consists of 10,000 shares of cumulative 7% preferred stock and 5,000 shares of common stock, both classes of a par value of \$50 per share, all of which, except 2,000 shares of common stock, was issued July 1, 1905, the date of incorporating.

The corporation has paid ten dividends of 5% each on the preferred stock.

In rendering a certified balance sheet as of June 30, 1915, what consideration should be given to the foregoing and why? (Maryland, December, 1915.)

Answer to Questions I—III

Arrears in cumulative dividends are not a liability of a corporation. A dividend becomes a liability as soon as it

is declared but not before. In treating the item of cumulative dividends in arrears on the balance sheet, it would seem part of the auditor's duty to call the attention of stockholders and other persons interested to the true condition in a footnote showing the total amount in arrears and the years in which the cumulative dividends were not paid in full. It is a usual provision, where there are cumulative dividends on preferred stock, that no dividends shall be paid on the common stock until the cumulative dividends are paid in full.

Question IV

Give three sound accounting principles governing the determination of profits distributable as dividends of a corporation. (Massachusetts, 1915.)

Answer

This question might have asked for only one principle covering the whole ground; any greater number can only be subdivisions of the one.

If a corporation actually has a surplus, it may properly declare a dividend. It is immaterial whether the surplus was earned, or contributed, or the result of some lucky accident, so long as it really exists. Of course, a dividend in such case might be unwise, might show poor judgment, because of special circumstances, but that is beside the question.

In order, then, to give three principles, as requested, we must name three matters that must be provided for before the book surplus can be depended upon as an actual surplus:

1. All operating costs of every nature must have been taken into account; not only actual expenditures, but ordinary depreciation on any fixed assets that are subject thereto.
2. If there are wasting assets, ample allowance for wastage to date must have been made.
3. If any of the assets are subject to reduction of value by improvements in the state of the art, or other contingency, proper deductions must be made. A new invention has frequently wiped out all, or nearly all, the value of a business based upon patent rights, or rendered obsolete machines that were expected to give many years of profitable service.

If any unusual items have been credited to Surplus on the books, as for instance appreciation of value of land, care must be taken that the amount of such credit is conservative. As to the wisdom of a dividend, various other questions arise, such as whether sufficient cash may be spared, whether the normal growth of the business does not require that the investment (which is capital plus surplus) be increased, etc.; but these appear to be questions of policy, rather than of sound accounting.

Question V

Discuss the subject of dividends:

- (a) When paid out of capital.
- (b) When declared out of premium secured from sale of capital stock.
- (c) When company's sole investments are in diminishing (or wasting) assets. (Wisconsin, 1915.)

Answer

(a) The Wisconsin statute, section 765, says in part:

"No dividend shall be paid to any stockholder of any corporation until the capital stock has been fully paid in, and no dividend shall thereafter be declared or paid by the corporation except out of net profits properly applicable thereto and which shall not in any way impair or diminish the capital."

(b) While there is no specific provision of the law prohibiting the payment of dividends out of premiums secured from the sale of capital stock, it would be most unwise to do so without clearly indicating the source of the dividend. Some view premiums on stock as capital contributions, and assert that under no circumstances could dividends be paid therefrom.

(c) Dividends may be declared in such companies without provision being made for the exhaustion of the property. (*Lee v. Neuchatel Asphalt Company, Limited*, L. R. 41 Ch. Div. 1.)

Question VI

A corporation has sufficient cash on hand to pay a 6% dividend. Before doing so, the directors ask you to look over their records and advise them. It is not to be a detailed audit. What points would you be careful to examine before reporting? Name conditions under which a dividend would not be advisable. (Michigan, December, 1915.)

Question VII

On preparing the balance sheet of a corporation as of December 31, 1914, you find that during 1914 a profit of 8% on capital stock at par value has been made, which

brings the balance of Undivided Profits account to 18% of the capital stock outstanding.

There is also a Surplus account, which has been greatly impaired during 1914 owing to writing off depreciations and losses which occurred in previous years.

State whether or not the directors may properly declare a dividend, giving your reasons in full. Would your answer be changed if the Surplus account had been extinguished instead of reduced by the above-mentioned entries? If so, how and why? (Florida, 1915.)

Answer to Questions VI and VII

The general rule of law is that dividends can be paid only out of profits, i.e., out of the net increase in the original investment after deducting from the assets all present debts and making provision for future and contingent claims. The directors of any concern may legally declare a dividend up to the extent of accumulated profits, whether there is sufficient cash on hand or not. Where there has not been sufficient cash, directors have in the past borrowed money to pay the dividend, the profits having been made but reinvested in the business. Profits, to be considered as such, should be net after adequate provision for depreciation, but the law is not specific on this point and the judgment of the directors, if made honestly, is taken to be conclusive.

In Question VII there would seem to be no good reason why a dividend of reasonable amount should not be declared whether the surplus is extinguished or only impaired. It is better business and more conservative not to disburse the entire surplus and undivided profits as dividends. The answer above assumes that depreciation has been provided for in 1914 as well as previous years.

In Question VI, before reporting, the auditor should

examine carefully into the earnings of the corporation for the period under consideration to ascertain whether they have been sufficient to justify the declaration of a dividend. Special attention should be given to see whether adequate charges have been made against the profits for depreciation, reserves, and similar items.

A dividend though earned would not be advisable where it depletes the Surplus account or necessitates a borrowing of the required cash. When the income has been unusually large owing to peculiar conditions that may not again arise for a number of years, it would be inadvisable to pay out the entire earnings in dividends immediately.

Conservative management would reserve at least a part of the earnings for dividend purposes in lean years.

Question VIII

A wholesale concern has been declared bankrupt, and the trustee in bankruptcy asks that information be given him to enable him to answer the following demands:

Certain of the directors of the bankrupt company hold notes given to them by the company, representing their share of dividends declared in December, 1913, and December, 1914. The trustee desires to know whether these notes constitute a valid claim against the company, as it is suggested that although the books indicate that apparently the dividends were legally declared in 1913 and 1914, there may have been written off subsequently certain losses which would affect the propriety of declaring such dividends.

State what your answer would be; what information it would be necessary for you to obtain to give to the trustee and how you would proceed to obtain it. (Florida, 1915.)

Answer

The dividends would not be affected by subsequent losses occurring in the regular course of business, and the propriety of declaring such dividends could not be questioned unless it could be proved that the earnings on which they were based were overstated to such an extent that the dividends were paid out of capital instead of profits. To ascertain whether this was the case, it would be necessary to make a balance sheet audit as at the end of 1914. Particular attention should be given to inventories to see that they were not priced at sales values, and also to depreciation and accrued items.

ECONOMIC THEORY

Question I

A man has saved \$10,000 which is invested at 6%. He is working for a concern at a salary of \$100 a month. He decides to go into business for himself. He invests his capital, forfeiting his interest. He devotes his time to the business, forfeiting his salary. At the end of the year his statement shows a profit of \$2,000. Can the business be said to have made \$2,000, or did it in reality only make \$200? Discuss fully the accounting and economic principles involved.

Suppose instead of money loaned, his capital had been in the form of a store rented for \$100 a month and he cancelled the lease and used it himself, borrowing what money was needed for working capital from the bank and paying interest for same. Would that alter the question of profit? (Michigan, December, 1915.)

Answer to Question I

The economic theory of production divides the sources of wealth into four classes :

1. Capital produces interest.
2. Land produces rent.
3. Labor produces wages.
4. Trade produces profit.

Following the above line of reason, the income derived from the first three sources should always be kept separate in order to determine the profit directly resulting from

engaging in business. However, when capital is invested in business by an individual, it is economically sound and correct accounting to consider the net return as profits, belonging to the "Entrepreneur."

In the case of the store lease cancelled, the same principles would hold good as the rent received is a return for the use of land. The owner can be said to have used such land as an investment in business. The interest paid would properly be an expense incurred for additional capital. The business produces the entire net profits resulting from the investment of land, capital, and labor, as the man in question has transferred his assets into another source of wealth.

Question II

In formulating a profit and loss account for a manufacturing concern in which factory rent is an element, under what classification would you allocate it in order to be economically sound? (Washington, 1915.)

Answer

Rent should be classified under "Expense of Capital" in order to conform to the economic theory of accounting. Economically, rent is a return for the use of land and as such should be segregated from the return from, or expense of, doing business. On the same theory, interest paid or received, constituting a return for the use of capital, should also be kept separate from the ordinary profit from, or expenses of, engaging in business.

Question III

The X corporation owns its factory and land. The Y

...

corporation occupies a similar factory which it hires. The X corporation pays a yearly interest on money borrowed. The Y corporation is not in debt for borrowed money. How should these disbursements be considered in determining cost? (Nebraska, 1915.)

Answer

In both companies the disbursements referred to are properly classified as "Expense of Capital" or as offsets to "Extraordinary Income." The economic theory of production should be followed in allocating expenses, and therefore the above disbursements could not be considered as part of the cost of manufacture.

EXECUTORS' ACCOUNTS

Question I

What *two* essential elements are involved in the accounting of executors? (New York, January, 1915.)

Question II

In auditing the accounts of an executor, what points should be especially examined? (Michigan, June, 1915.)

Question III

Describe briefly your procedure in auditing the accounts of an executor for the first six months following the decease of the testator. (Maryland, December, 1915.)

Question IV

Discuss briefly, the accounting requirements of decedents' estates, with special reference to the various interests which may arise thereunder. (Kansas and Missouri, 1915.)

Question V

What items among the receipts should require particular attention in an executor's accounts as to their correct application in the books for the first year or two in an estate in which the life tenants are not the same persons as the remaindermen. The estate consists of cash, stocks, bonds, mortgages, and other personal property. (Pennsylvania, 1915.)

Answer to Questions I—V

The two essential elements involved in the accounting of executors are corpus and income. The corpus is represented by the original inventory of the estate, and subsequent increase thereof in accordance with the rulings of the courts as to what reverts to the corpus. The income is what the estate has produced which can in no way be considered as part of the original inventory of the estate. The distinction closely corresponds to the division between capital expenditures and income expenditures in an audit of any manufacturing or mercantile enterprise.

The following paragraphs pertaining to the audit of the accounts of an executor are taken from "Auditing, Theory and Practice" by Montgomery, Chapter XXVII:

"An audit of the accounts of executors or trustees properly begins with a careful reading of the will or deed of trust, as the provisions of these documents will have an important bearing on the actions of the executors or trustees as reflected in their accounts. While the apportionment of

receipts and payments between capital and income should always receive attention in the auditing of trusts, it becomes extremely important under some wills and trust deeds.

"Having examined the documents from which the trustees derive their power, the auditor should next compare a certified copy of the inventory of the estate, which was filed with a court of probate, with the trustees' books, to see that all the assets scheduled in the inventory have been entered in the books and at the appraised values. Should the trust have already been in existence for a considerable time and the audit not go back to its inception, it is desirable that the examination start with the date with which the most recent account approved by the court closed.

"The income from securities should be verified in detail. This can usually be very satisfactorily done; even if the securities are not listed on a stock exchange, information as to dividends or interest paid thereon can in almost all cases be obtained without much difficulty. Overdue interest on mortgages should be investigated.

"When examining the securities, which work is an important feature of the audit, the auditor should see that they are registered in the names of all the trustees, if there are more than one.

"If real estate has been committed to the care of the trustees, or if the will gives the executors the custody and disposition of the testator's real estate, the rentals therefrom will need to be verified and taxes and other realty expenses vouched.

"Vouchers should be submitted to the auditor for all payments. In verifying the correctness of the credits taken by the executors or trustees, the commissions paid or claimed should be carefully scrutinized. Their arithmetical correctness can usually be verified in total, but it is also important to see that the basis on which they were calculated is a

proper one. Particularly must duplications of commissions be guarded against. If an executor becomes trustee of an estate after being discharged as executor, he will receive but one commission on the principal of the estate. Furthermore, a commission is not ordinarily allowed on changes of investments, though it is usually allowed on the net increase, if any, in the principal caused by such changes. The average rates of commission allowed executors and trustees of decedents' estates are $2\frac{1}{2}$ or 3 per cent on the principal and 5 per cent on the income handled; but rates vary, and in some states a sliding scale of commissions is in force. In the case of large estates, however, a different rate or a fixed amount of compensation is sometimes named in the will (frequently, no doubt, in pursuance of an agreement between the executor to be and the testator during the latter's lifetime), and by accepting the trust the executor binds himself to limit his commission in accordance with the stipulation in the will. Presumably, however, if the executor declined to serve and no one could be found who would be willing to accept the trust for the stipulated compensation, the probate court could appoint an administrator who would not be bound by this stipulation of the will, but would be allowed the ordinary rate of commission. . . .

"In a complete audit of the accounts of a trust estate, the investments made by the trustees should also be reviewed from the standpoint of whether they were legitimate at the time they were made. The character of investments which are legal for trust funds vary in different states; generally they are first mortgages on real estate, government (federal, state, county, and municipal) bonds, and the first mortgage bonds of railroads having an established dividend record.

"The importance of a correct apportionment of all receipts and payments between principal and income has already been mentioned. In this connection it should be borne

in mind that interest and rents accrued to the date of the testator's decease are part of the *corpus* or principal of the estate; that profits realized or losses sustained on the liquidation of legitimate investments are added to or deducted from the principal; that expenses during the period of the executorship are paid out of principal and not from income, excepting expenses connected with improved real estate which are chargeable against the income derived therefrom; that losses on unauthorized or illegal investments are chargeable to the trustees personally, with such interest (usually at the rate of 6 per cent per annum without compounding) as may be directed by the court; that a trustee is similarly chargeable with interest on funds actively applied to his own use or indirectly so applied by merging them with his own funds, even though he may have balances on deposit to his personal credit in excess of the trust funds for which he is responsible; that, even when investments of a wasting nature are specifically authorized, or form the original principal of the estate, a life tenant does not necessarily receive the entire gross income. When the instrument creating the trust provides that the life tenant and the remainderman shall benefit equally from such investments, it is usual to treat such part of the receipts from the investment as equals, say, 5 per cent on the appraised value of the investment at the time the trust was created, as income for the life tenant, and to capitalize the amount received in excess thereof.

"The proceeds from the sale of rights given to stockholders to subscribe for new stock at less than its market value belong to the principal. The additions to the principal from such sales are generally offset by a reduction in the value of the old stock.

"The terms of the will or trust deed may, however, modify any of the foregoing rules, and hence the importance

of the auditor's studying carefully the conditions of the trust.

"With regard to premiums paid on securities purchased by the estate, the usual rule is that they come out of the principal of the estate. Discounts on bonds purchased inure to the benefit of the principal. As probably the great majority of investments which are legal for trust funds sell at a premium rather than at a discount, one does not offset the other. From an accounting standpoint, premiums paid on bonds purchased should be amortized over the life of the bonds, and a portion of each interest payment retained to refund the premium advanced from the principal of the estate, and only the actual income yield on the investment paid over to the life tenant. The accountant must, however, in this as in all matters pertaining to trust estates, be guided by the rules laid down by the court, which are not uniform in the different states. It is to be hoped that the courts will in time give effect to a more logical treatment of premiums on bonds than they have in the past."

Question VI

(a) Name the principal debit and credit accounts—both corpus and income—that an executor should keep, and briefly describe their purpose.

(b) Under what heading, corpus or income, would you, as a general rule, place the following:

1. Funeral expenses.
2. Executor's expenses.
3. Profit and loss on sale of investments.
4. Cash dividend on investment of executor.
5. Cash dividend on investment of testator.

6. Cash legacies.
7. Property legacies.
8. Quarterly allowance to widow. (Wisconsin, 1915.)

Answer

(a) **Corpus:**

1. Individual accounts with each asset owned.
2. Accounts representing accruals due to deceased at time of death.
3. Individual accounts with each liability owed.
4. Accounts representing accruals due by deceased at time of death.
5. Estate account—credited with difference between total assets and liabilities of deceased.
6. Funeral expenses.
7. Legatees.

Income:

1. Accounts with sources of revenue received and expenditure made by the executor.
2. Account to determine net income or deficit.

(b) 1. **Corpus.**

2. Corpus or income according to nature of services.
3. Corpus.
4. Income.
5. Dividends declared before time of death are corpus; after death, income.
6. Corpus.
7. Corpus.
8. As provided in will.

Question VII

A dies, leaving a small estate. In his will he directed the creating of a separate trust for each of his two married daughters and also provided that the residuary estate should be divided between the two daughters, share and share alike, on the death of the widow who was made a life tenant of the residuary estate. When called on by the executor to prepare his accounts for filing, you find that, as the income from the residuary estate was not sufficient to pay administration expenses and to maintain the widow as she had been accustomed to live, the executor had made a loan to the widow from the principal of the estate and had taken as security non-income producing collateral, the loan being made without interest. Was the executor authorized to make such a loan, and, if so, how should it be stated in the executor's accounting? (New York, June, 1915.)

Answer

The executor is not justified in making such a loan and would be accountable to the residuary legatees for the amount involved, with legal interest. The loan should be returned to the estate immediately with interest, and thus eliminated from executor's accounts.

Question VIII

In the will of James Lee, who died April 15, 1913, one-half of his estate was left to his wife, outright; the balance to be held in trust, income of which was to go to his wife during her lifetime, and at her death the principal to go to the Crittenton Home.

The estate was appraised as follows:

EXECUTORS' ACCOUNTS

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250 shares of Northern Pacific Ry. Co.....	\$40,000.00
250 shares of Truckee Gen. Electric Co.....	41,500.00
500 shares of Nevada Cons. Eng. Co. (par \$50).....	30,750.00
1,000 shares of Reno Improvement Co. (par \$25).....	49,000.00
Deposits in Banks.....	5,050.00
Cash	200.00
	\$166,500.00

Dividends had been declared as follows:

Rate	Date Declared	To Stock of Record	Date Payable
2% Northern Pacific.....	March 15	April 1	April 16
2% Truckee General Electric.....	" 15	March 31	" 20
2% Reno Improvement.....	" 21	April 1	" 20

From April 15, 1913, to April 15, 1914, the cash receipts were:

Northern Pacific.....	4 quarterly dividends	\$2,000.00
Truckee General Electric.....	4 " "	2,000.00
Nevada Cons. Eng. Co.....	4 " "	1,500.00
Reno Improvement Co.....	4 " "	2,000.00
Interest on Bank Balances.....		75.00
		\$7,575.00

Disbursements were:

Debts of Testator.....	\$1,125.00
Funeral Expenses, etc.....	375.00
Income of Widow.....	5,000.00
	\$6,500.00

The executor was allowed commissions of 5% of the income and 2½% of the principal, and on April 15, 1914, he paid the balance of the income to the widow and distributed the principal in equal shares at the appraised value, between the widow and the trust fund.

(a) State amount of commission received by executor.

(b) State amount received by widow as balance of income.

(c) State amount of cash paid into trust fund. (Nevada, 1915.)

Answer to Question VIII

ESTATE OF JAMES LEE, DECEASED

CASH TRANSACTIONS, APRIL 15, 1913, TO APRIL 15, 1914

Details of Transactions	Principal		Income	
	Debit	Credit	Debit	Credit
Inventory:				
Deposit in Banks.....		\$5,050.00		
Cash on Hand.....		200.00		
Dividends Received:				
Northern Pacific Ry. Co.		500.00		\$1,500.00
Truckee Gen. Elec. Co... ..		500.00		1,500.00
Nevada Cons. Eng. Co... ..				1,500.00
Reno Improvement Co... ..		500.00		1,500.00
Interest on Bank Balances..				75.00
Debts of Testator.....	\$1,125.00			
Funeral Expenses, etc.....	375.00			
Income to Widow.....			\$5,000.00	
Totals	\$1,500.00	\$6,750.00	\$5,000.00	\$6,075.00
Balances, April 15, 1914..	5,250.00		1,075.00	
	<u>\$6,750.00</u>	<u>\$6,750.00</u>	<u>\$6,075.00</u>	<u>\$6,075.00</u>
Balances April 15, 1914..		\$5,250.00		\$1,075.00
Executor's Commission:				
On Principal:				
Inventory ...\$166,500.00				
Increases ... 1,500.00				
2½% on....\$168,000.00	\$4,200.00			
On Income:				
5% on..... \$6,075.00			\$303.75	
Balance of Income to Widow			771.25	
Balance of Principal:				
½ to Widow.....	525.00			
½ to Trust Fund.....	525.00			
	<u>\$5,250.00</u>	<u>\$5,250.00</u>	<u>\$1,075.00</u>	<u>\$1,075.00</u>

Comments

The amounts called for by the problem are clearly indicated in the trial balance form of solution to which this type of problem readily lends itself; they are respectively, (a) \$4,200; (b) \$771.25; (c) \$525.

The problem does not offer any particular difficulty to a student familiar with executors' accounts. The period covered is from April 15, 1913, the date of the testator's death, to April 15, 1914, the date of the accountant's report.

It is evident that the dividends on the stocks of the Northern Pacific Railway Company, Truckee Electric, and Reno Improvement Company could not have been received before the date of the testator's death. Inasmuch as the dividends were declared before the date of death, they fall to corpus. The other cash receipts reported are clearly income.

With respect to the dividends on the stocks of the Nevada Consolidated Engine Company, the problem does not state that dividends were declared before April 15, 1913; yet it seems improbable that the first dividend was declared *after* the date of the decedent's death because the problem states that four quarterly dividends were received between April 15, 1913, and April 15, 1914. However, as there is nothing in the facts to justify an apportionment as between corpus and income in this case, the entire amount received in dividends has been treated as income.

Question IX

John Brown died, leaving an estate consisting of realty and personalty, and in his will named George Green as executor and trustee. Under the will the executor was vested only with the naked power of sale (so far as the

realty was concerned), the whole estate being devised in trust for the benefit of a sole legatee. George Green, as executor, sold a certain parcel of realty to William Smith for \$3,000, the full amount in cash. He subsequently, as trustee, advanced Smith \$2,000 as a builder's loan, receiving as security a first mortgage on the property, including the improvements. As a protection he further received from Smith a policy of insurance for \$2,500 to protect the mortgage. Two years later Smith defaulted in the payment of his interest and taxes and would pay no attention to the trustee's requests that he make such payment. Smith's continued neglect resulted in foreclosure proceedings, brought by the trustee, which terminated in the trustee's obtaining title to the property. The back interest, taxes, and foreclosure expenses amounted to \$375. In a spirit of revenge Smith set fire to the house and caused its total destruction. The trustee obtained \$2,500 from the insurance company in settlement of the loss, and subsequently sold the lot for \$2,000. State briefly the necessary entries to be made by the executor and trustee to record properly the amounts so received. (New York, June, 1915.)

Answer to Question IX

The executor's entries:

Cash	\$3,000.00	
To Real Estate.....		\$3,000.00
Trustee	2,900.00	
Commission	100.00	
To Cash.....		3,000.00

The executor is entitled to a commission of \$100 on his receipts and disbursements.

The trustee's entries:

Cash	\$2,900.00	
To Trust Account.....		\$2,900.00
Mortgages Received.....	2,000.00	
To Cash.....		2,000.00
Mortgages Received.....	375.00	
To Cash.....		375.00
Real Estate.....	2,375.00	
To Mortgages Received.....		2,375.00
Cash	2,500.00	
To Real Estate.....		2,500.00
Cash	2,000.00	
To Real Estate.....		2,000.00
Real Estate.....	2,125.00	
To Loss and Gain.....		2,125.00
Loss and Gain.....	2,125.00	
To Trust Account.....		2,125.00

At the close of the transactions given, the Trust account will have to its credit \$5,025.

Question X

Describe the precautions necessary to safeguard a corporation when an executor presents a certificate of stock for transfer. (Massachusetts, 1915.)

Answer

The corporation must have evidence that the holder of record is deceased, and that the person presenting the certificate is the legal representative of his estate, which evidence usually takes the form of a certified copy of the

appointment by the judge of probate of such person as executor or administrator.

This question appears to be one of law rather than of accounting; and it may be noted that the Massachusetts transfer tax does not apply to transfers of stock into the name of an executor or administrator as such.

FINANCIAL STATEMENTS*

Question I

The following is the trial balance of the United Cotton Mills at the close of business on December 31, 1914:

Lands	\$230,450.00	
Buildings and Machinery.....	360,000.00	
Dwellings	10,000.00	
Additions and Improvements.....	9,500.00	
Cash	15,400.00	
Accounts Receivable.....	100,375.00	
Advances to Employees.....	350.00	
Interest on Bonds.....	5,500.00	
Interest and Discounts.....	10,000.00	
Inventory, December 31, 1913:		
Manufactured Goods.....	50,500.00	
Cotton in Process of Manufacture.....	34,000.00	
Cotton	5,500.00	
Discounts	13,150.00	
Cotton	346,000.00	
Maintenance and Repairs.....	10,560.50	
Labor	100,285.50	
Fuel and Supplies.....	35,000.00	
Dyeing Expenses.....	37,250.00	
Selling Expenses.....	6,950.00	
Salaries	13,500.00	
Office Expenses.....	2,100.00	
Postage, Telegrams, and Telephone.....	3,050.00	
Insurance	2,750.00	
Taxes	3,500.00	
Incidental Expenses.....	1,150.00	
Real Estate Expenses.....	530.00	
Capital Stock.....		\$400,000.00
First Mortgage Bonds.....		100,000.00

*See also "Balance Sheets," page 56.

Bills Payable.....	150,000.00	
Accounts Payable.....	2,500.00	
Sales—Manufactured Goods.....	650,505.00	
Sales—Waste	10,100.50	
Rent	960.00	
Profit and Loss.....	93,285.50	
	<u>\$1,407,351.00</u>	<u>\$1,407,351.00</u>

The inventories on December 31, 1914, were as follows :

Manufactured Goods.....	\$43,628.80
Cotton in Process of Manufacture.....	35,000.00
Cotton	6,500.00
Fuel and Supplies.....	1,789.60

During the year the factory produced 2,710,200 lbs. of cotton goods. Prepaid insurance was \$750; unearned interest, \$2,500; factory pay-rolls accrued, but not paid, \$970.

The first mortgage bonds outstanding bear interest at the rate of 6% per annum, payable semiannually on June 1 and December 1. A reserve of \$2,350 should be made for discounts.

At a meeting held on December 31, 1914, the board of directors declared a dividend of 6% on the capital stock, payable on January 15, 1915, and reserved \$18,000 for depreciation.

From the foregoing, you are asked to prepare :

1. Closing entries.
2. Exhibit of operations and statement of profit and loss.
3. Balance sheet showing the condition of the company on December 31, 1914.
4. Return of annual net income under the Income Tax Law. (Louisiana, 1915.)

Answer to Question I

UNITED COTTON MILLS

JOURNAL ENTRIES

Manufactured Goods Inventory (New).....	\$43,628.80	
Cotton in Process of Manufacture (New).....	35,000.00	
Cotton Inventory (New).....	6,500.00	
Fuel and Supplies Inventory (New).....	1,789.60	
To Manufactured Goods Inventory (Old)		\$43,628.80
" Cotton in Process of Manufacture In-		
ventory (Old).....		35,000.00
" Cotton Inventory (Old).....		6,500.00
" Fuel and Supplies.....		1,789.60
Insurance Unexpired.....	750.00	
To Insurance.....		750.00
Interest Paid in Advance.....	2,500.00	
To Interest and Discounts.....		2,500.00
Labor	970.00	
To Wages Accrued.....		970.00
Interest on Bonds.....	500.00	
To Interest on Bonds Accrued.....		500.00
Discounts	2,350.00	
To Reserve on Discounts.....		2,350.00
Dividends Declared.....	24,000.00	
To Dividends Payable.....		24,000.00
Provision for Reserve for Depreciation.....	18,000.00	
To Reserve for Depreciation.....		18,000.00
Sales—Manufactured Goods.....	650,505.00	
Sales—Waste	10,100.50	
Rent	960.00	
Cotton in Process of Manufacture—Inventory...	1,000.00	
Cotton Inventory.....	1,000.00	
To Interest on Bonds.....		6,000.00
" Interest and Discounts.....		7,500.00

To Manufactured Goods Inventory.....	6,871.20
" Discounts	15,500.00
" Cotton	346,000.00
" Maintenance and Repairs.....	10,560.50
" Labor	101,255.50
" Fuel and Supplies.....	33,210.40
" Dyeing Expenses.....	37,250.00
" Selling Expenses.....	6,950.00
" Salaries	13,500.00
" Office Expenses.....	2,100.00
" Postage, Telegrams, and Telephone....	3,050.00
" Insurance	2,000.00
" Taxes	3,500.00
" Incidental Expenses.....	1,150.00
" Real Estate Expenses.....	530.00
" Provision for Depreciation.....	18,000.00
" Profit and Loss.....	48,637.90
Profit and Loss.....	24,000.00
To Dividends Declared.....	24,000.00

UNITED COTTON MILLS

STATEMENT OF INCOME AND PROFIT & LOSS
For the Year Ending December 31, 1914

Income from Sales:

Manufactured Goods.....	\$650,505.00
Less Discounts.....	15,500.00

\$635,005.00

Waste	10,100.50
-------------	-----------

Total Income from Sales..... \$645,105.50

Cost of Sales:

Cotton—Purchases	\$346,000.00
Less Increase in Inventory.....	1,000.00

Cost of Cotton Consumed..... \$345,000.00

Labor 101,255.50

Fuel and Supplies..... 33,210.40

Dyeing Expenses..... 37,250.00

Maintenance and Repairs..... 10,560.50

Total..... \$527,276.40

FINANCIAL STATEMENTS

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Deduct Increase in Inventory—Cotton in Process of Manufacture.....	1,000.00	
	<u>\$526,276.40</u>	
Add Decrease in Inventory—Manufactured Goods.....	6,871.20	
Total Cost of Sales.....		<u>533,147.60</u>
Gross Profit on Sales.....		<u>\$111,957.90</u>
Selling Expenses.....		<u>6,950.00</u>
Selling Profit.....		<u>\$105,007.90</u>
Administrative Expense:		
Salaries.....	\$13,500.00	
Office Expenses.....	2,100.00	
Postage, Telegrams, and Telephone.....	3,050.00	
Incidental Expenses.....	1,150.00	
Total Administrative Expense.....		<u>19,800.00</u>
Net Profit on Sales—Income from Operation.....		<u>\$85,207.90</u>
Other Income:		
Rent		<u>960.00</u>
Total Income.....		<u>\$86,167.90</u>
Deductions from Income:		
Insurance.....	\$2,000.00	
Taxes.....	3,500.00	
Interest on Bonds.....	6,000.00	
Interest and Discounts.....	7,500.00	
Real Estate Expense.....	530.00	
Total Deductions from Income.....		<u>19,530.00</u>
Net Income—Profit and Loss.....		<u>\$66,637.90</u>
Profit and Loss Charge:		
Provision for Reserve for Depreciation.....		<u>18,000.00</u>
Profit and Loss for the year.....		<u>\$48,637.90</u>
Deduct Dividend Declared.....		<u>24,000.00</u>
Profit and Loss—Added to Surplus.....		<u>\$24,637.90</u>
Add Previous Surplus.....		<u>93,285.50</u>
Surplus as per Balance Sheet.....		<u><u>\$117,923.40</u></u>

UNITED COTTON MILLS
BALANCE SHEET, DECEMBER 31, 1914

<i>Assets</i>		<i>Liabilities and Capital</i>	
Fixed Assets:		Capital Stock.....	\$400,000.00
Lands.....	\$230,450.00	First Mortgage Bonds.....	100,000.00
Buildings and Machinery....	350,000.00	Current Liabilities:	
Dwellings.....	10,000.00	Wages Accrued.....	\$970.00
Additions and Improvements	9,500.00	Interest on Bonds Accrued..	500.00
Total Fixed Assets.....	\$609,950.00	Dividends Payable.....	24,000.00
Working and Trading Assets:		Bills Payable.....	150,000.00
Manufactured Goods.....	\$43,628.80	Accounts Payable.....	2,500.00
Cotton in Process of Manu-		Total Current Liabilities.....	177,970.00
facture	35,000.00	Reserves:	
Cotton	6,500.00	For Depreciation.....	\$18,000.00
Fuel and Supplies.....	1,789.60	For Discounts.....	2,350.00
Total Working and Trading Assets..	86,918.40	Total Reserves.....	20,350.00
Current Assets:		Profit and Loss—Surplus.....	117,923.40
Cash.....	\$15,400.00		
Accounts Receivable.....	100,375.00		
Advances to Employees.....	350.00		
Total Current Assets.....	116,125.00		
Deferred Charges to Expense:			
Insurance Unexpired.....	\$750.00		
Interest Paid in Advance....	2,500.00		
Total Deferred Charges to Expense..	3,250.00		
Total Assets.....	\$816,243.40	Total Liabilities and Capital.....	\$816,243.40

UNITED COTTON MILLS

RETURN OF ANNUAL NET INCOME UNDER INCOME
TAX LAW

1. Total amount of paid-up capital stock outstanding at the close of the year.....	\$400,000.00
2. Total amount of bonded and other interest-bearing indebtedness outstanding at the close of the year, etc....	100,000.00
3. Gross Income:	
(a) From Operations.....	\$294,234.30
(b) From Rentals.....	960.00
(c) From Interest.....	none
(d) From Dividends Received.....	none
(e) From Other Sources.....	none
Total Gross Income.....	<u>\$295,194.30</u>
Deductions:	
4. (a) Expenses, General.....	\$211,556.40
(b) Payments in lieu of Rent.....	none
5. (a) Losses Sustained.....	none
(b) Depreciation	18,000.00
(c) Depletion (Natural Deposits).....	none
6. (a) Interest Paid.....	13,500.00
(b) Interest Paid by Banks on Deposit....	none
7. (a) Taxes, Domestic Paid.....	3,500.00
(b) Taxes, Foreign Paid.....	none
Total Deductions.....	<u>246,556.40</u>
8. Net Income.....	<u>\$48,637.90</u>
9. Tax Assessable.....	<u>486.38</u>

NOTES: The number of pounds of cotton produced has been disregarded as having no bearing on the solution of the problem.

Unearned interest is assumed to be a deferred charge.

Sales of waste might have been used to reduce the factory cost of sales.

In the absence of evidence to the contrary, discounts have been treated as trade discounts.

Under the income tax law of 1916, the tax assessment is 2% instead of 1%.

Question II

The Wilson Company publishes a magazine which is issued on the 15th of the month. They contract for the printing and binding and make equal semimonthly payments to the contractor.

A summary of their transactions from October 15 to December 30, 1914, is as follows: payments on printing and binding contract, \$25,000; subscriptions obtained, \$40,200, of which \$200 represents unearned subscriptions; office expenses, \$4,500; office salaries, \$10,000. The office equipment is valued at \$5,000. There are unpaid subscriptions amounting to \$17,000; cash on hand, \$10,000; unpublished manuscripts, \$4,500; due to authors, \$2,000; accounts payable, \$4,000. The company has capital stock outstanding, \$25,000, and a surplus on October 15, 1914, of \$4,800.

Prepare a profit and loss statement for the period from October 15 to December 31, 1914, and a balance sheet as of December 31, 1914. (New York, January, 1915.)

Answer*Comments*

This problem is susceptible of several solutions equally logical, and from the point of view of the writer, equally acceptable. The different solutions are based upon the interpretation given to the instalment provisions of the contract, as well as upon the understanding of the nature of the payment of \$25,000 made between October 15 and December 30, 1914. Is the instalment of October 15 the first, or the second payment for the magazine just issued? Was the instalment due at the end of December included in the \$25,000, or is it not included therein? The importance of the above possibilities is fully illustrated by the following:

1. Under the assumption that the payment due at the end of December, 1914 applies to the January issue and

that it has not been made on December 30, but on December 31, this amount is not included in the \$25,000 and must therefore be deducted from the cash balance of \$10,000, and shown on the balance sheet as an advance payment for the January issue:

Oct. 30, 1914	Advance instalment, November 15 publication	\$6,250.00
Nov. 15, 1914	Last instalment, November 15 publication....	6,250.00
	Total for November issue.....	<u>\$12,500.00</u>
Nov. 30, 1914	Advance instalment, December 15 publication	\$6,250.00
Dec. 15, 1914	Last instalment, December 15 publication....	6,250.00
	Total for December issue.....	<u>\$12,500.00</u>
Cost of publishing the two magazines issued during the period under review.....		<u><u>\$25,000.00</u></u>

Under the assumption that the payment of \$25,000 includes the cost of publishing for November 15 and December 15 and also an advance payment for January:

Oct. 30, 1914	First instalment, November 15 publication....	\$5,000.00
Nov. 15, 1914	Last instalment, November 15 publication.....	5,000.00
	Cost of November issue.....	<u>\$10,000.00</u>
Nov. 30, 1914	First instalment, December 15 publication....	\$5,000.00
Dec. 15, 1914	Last instalment, December 15 publication.....	5,000.00
	Cost of December issue.....	<u>\$10,000.00</u>
Cost of publishing the two magazines issued during the period under review.....		<u>\$20,000.00</u>
Advance payment for January 15 publication.....		5,000.00
	Total paid during the period.....	<u><u>\$25,000.00</u></u>

Other assumptions could be made, but it is not necessary to go further in order to show the vagueness of the problem.

The following two solutions are based on the two assumptions given above.

STATEMENT OF INCOME AND PROFIT AND LOSS

For the Period from October 15 to December 31, 1914

	1st solution		2nd solution	
Income from Publications:				
Subscriptions Earned.....		\$40,000.00		\$40,000.00
Cost of Publications:				
Printing and Binding:				
November 15.....	\$12,500.00		\$10,000.00	
December 15.....	12,500.00	25,000.00	10,000.00	20,000.00
Gross Profit on Publications		\$15,000.00		\$20,000.00
General and Administration Expenses:				
Office Expense.....	\$4,500.00		\$4,500.00	
Office Salaries.....	10,000.00		10,000.00	
Total.....	\$14,500.00		\$14,500.00	
Less $\frac{1}{5}$ applicable to subsequent period*.....	2,900.00	11,600.00	2,900.00	11,600.00
Profit and Loss Surplus for the Period.....		\$3,400.00		\$8,400.00
Surplus, October 15, 1914...		4,800.00		4,800.00
Surplus, December 31, 1914..		\$8,200.00		\$13,200.00

One-fifth of the total expenses, since there are only two magazines published in $2\frac{1}{2}$ months.

GENERAL BALANCE SHEET, DECEMBER 31, 1914

Assets

	1st solution	2nd solution
Office Equipment.....	\$5,000.00	\$5,000.00
Cash	3,750.00	10,000.00
Advance Payment—January Magazine.....	6,250.00	5,000.00
Uncollected Subscriptions.....	17,000.00	17,000.00
Unpublished Manuscripts.....	4,500.00	4,500.00
Expenses Applicable to Subsequent Period*....	2,900.00	2,900.00
	\$39,400.00	\$44,400.00

Liabilities

	1st solution	2nd solution
Capital Stock.....	\$25,000.00	\$25,000.00
Due to Authors.....	2,000.00	2,000.00
Accounts Payable.....	4,000.00	4,000.00
Unearned Subscriptions.....	200.00	200.00
Surplus	8,200.00	13,200.00
	<u>\$39,400.00</u>	<u>\$44,400.00</u>

The question at issue is: Would the board accept both solutions and give them equal credit?

FIRE INSURANCE

Question I

Assuming that you are a certified public accountant and employed as auditor by a corporation, state what you would consider it your duty to do in order to safeguard your clients regarding the fire insurance that they carry on their stock of merchandise. (New York, June, 1915.)

Answer

Determine from the record the amount of insurance carried during each month under audit, and compare the amount with the average merchandise stock during that month to determine whether the corporation was either over or under insured, and, if underinsured, to what extent it has become a coinsurer under the terms of the policies.

Compare the policies of insurance with the record thereof and examine each policy to ascertain the following:

- (a) That the stock of merchandise is described in precisely the same words in each policy, and that the location of the stock is also properly stated in each policy.
 - (b) That the description of the merchandise covers fairly and adequately the merchandise in the inventory.
 - (c) That the coinsurance clause (if any) is identical in all policies covering the same property.
 - (d) That special privilege clauses are attached to and made part of each policy.
 - (e) That if a chattel mortgage exists against the merchandise, each policy has the mortgage clause duly attached.
 - (f) That in all other respects the corporation is observing the terms of the contract of insurance as stated in the policies.
-

Question II

A corporation manufacturing explosives was compelled to pay exorbitant rates for a very limited amount of insurance, and in consequence was obliged to install an automatic sprinkler system at a cost of \$75,000. This additional fire protection enabled it to secure a full line of insurance, though in mutual companies, and at a much lower rate than was obtainable prior to such installation. At the end of the fiscal year the company received dividends from these mutual insurance companies, aggregating \$2,000. To what account should the cost of the sprinkler system be charged and to what account should this dividend be credited? State your reasons fully. (New York, June, 1915.)

Answer

The cost of the sprinkler system would be charged to Automatic Sprinkler Equipment or Building and Equipment account.

The installation of the automatic sprinkler system is an addition to the value of the property and should be recorded as such. Proper provision should, of course, be made for annual depreciation.

The premiums paid to the mutual insurance companies should be charged to an insurance account, to which account the dividends of \$2,000 should be credited. The premiums paid at first are in the nature of a tentative assessment, the exact extent of which is not known until the close of the period when the tentative assessment is made permanent or reduced by dividends.

Question III

Describe the practical application of coinsurance. (Maryland, December, 1915.)

Question IV

The Graham Mercantile Company have a fire. It is ascertained that at the time of the fire their merchandise inventory was \$10,000, on which they sustained a loss of \$5,000. Their merchandise was insured for \$7,000, subject to the coinsurance clause of 80%. What should the insurance company offer them in settlement of this loss? (Arkansas, 1915.)

Answer to Questions III and IV

The fundamental principal of coinsurance is that the insured assumes part of the risk with the insurance com-

pany. Under the 80% coinsurance clause, it is required that the property be insured for at least 80% of its value and that the insured bear 20% of the loss in case the entire property is destroyed.

In the case stated, as the property is not insured for 80% of its value, the company will offer the same percentage of the loss as the insurance carried is to 80%. The Mercantile Company should therefore receive $\frac{7}{8}$ of the loss, or \$4,375.

Question V

(a) Outline a method for determining the approximate value of a stock of merchandise totally destroyed by fire, assuming the books to have been saved, and that inventories have been taken annually.

(b) What notice, if any, should an auditor take of the fact that the client has, at risk of loss by fire, property on which no insurance is carried?

(c) What is the duty of an auditor to his clients regarding the amount of insurance that they carry on their stock of merchandise? (Wisconsin, 1915.)

Answer

(a) Take the inventory at the beginning of the year, add the purchases, and from their sum subtract the cost of the sales of the period. To determine the cost of the sales, find the average gross profit realized in previous years, and subtract that portion of the sales from total sales of the period.

(b) The auditor should examine all policies as to date, amount, and date of expiration. If the client owns property on which no insurance is carried, attention should be called to such fact in the report. The charge for the protection

of the property should be included as a cost of doing business, and there is little excuse for the condition on which the question is based.

(c) The auditor should see that his client is not carrying a part of his own insurance by neglecting to take out sufficient insurance on his merchandise.

FOREIGN EXCHANGE

Question I

A banking concern deals in foreign exchange and the following are the transactions with a London correspondent for one month:

Debits

Sept. 1	Remittance, thirty-day bill	£400.....	@ 4.86
" 10	" sight bill	£100-10-0.....	@ 4.87
" 15	" demand bill	£200-0 -6.....	@ 4.86¾

Credits

Sept. 2	Draft sight	£300.....	@ 4.87½
" 12	" demand	£200-12-5.....	@ 4.87
" 20	Cable,	£100.....	@ 4.88

(a) Ascertain the profit or loss in the account for the month.

(b) State the balance of the account at the end of the month in foreign and domestic currency, the current rate of sterling exchange being cable transfers 4.89. (Massachusetts, 1915.)

Answer

The two answers desired must be obtained in inverse order, but both readily appear from the following copy of the ledger account of the banking concern:

Debits

Sept. 1	30-day Bill.....	£400- 0-0 @ 4.86	\$1,944.00
10	Sight Bill.....	100-10-0 @ 4.87	489.44
15	Demand Bill.....	200- 0-6 @ 4.86¾	973.62
	Total	£700-10-6	\$3,407.06
30	Book Profit.....		9.00
		£700-10-6	\$3,416.06
Oct. 1	Balance brought down (from credit side).....	£99-18-1 @ 4.89	\$488.53

Credits

Sept. 2	Draft, Sight.....	£300- 0-0 @ 4.87½	\$1,462.50
12	Draft, Demand.....	200-12-5 @ 4.87	977.03
20	Cable	100- 0-0 @ 4.88	488.00
	Total	£600-12-5	\$2,927.53
30	Balance, down.....	99-18-1 @ 4.89	488.53
		£700-10-6	\$3,416.06

All questions of interest are disregarded, as no interest rates are mentioned. Note that the book profit due to fluctuations of exchange rate may be offset by a book loss, or increased by additional profit, when the account is balanced; that is, the actual profit or loss is not known until the time of final settlement.

The desired answers are:

(a) Profit of \$9.

(b) £99-18-1 @ 4.89, or \$488.53.

FRAUD, DETECTION OF

Question I

The general ledger of a trading concern contains, in addition to the usual balance sheet and profit and loss accounts, personal accounts of officers whose salaries are credited and drawings charged thereto. In addition to currency drawings on signed and numbered vouchers, they are all privileged to pay private bills with company checks, and also to purchase company merchandise for personal use.

The general ledger and general journal are kept by, and in full charge of, one of the officers. This officer handles no funds of the company. The ledger is in balance; there are no errors in the footings of the ledger accounts; the cash at banks and in hand is correct; and this officer's account shows a small credit balance.

You find that periodical statements prepared by this officer are accepted without question; and that several amounts stated thereon are in agreement with balances of the respective accounts in the general ledger.

(a) State three ways by which this officer, without collusion, might defraud the company.

(b) State, briefly, how you would adjust any differences that might be disclosed; and

(c) What preparation you, as a public accountant, would make to clearly state the facts and prove the defalcation in event you are required to give expert testimony in court proceedings. (Wisconsin, 1915.)

Answer to Question I

(a) 1. By overcredits to his account for salary. Officers' salaries for the month could be aggregated, and credits posted to the individual accounts. He thus has a larger credit against which to draw.

2. By charging expense accounts, individually or in aggregate for round amounts, for items properly chargeable to his personal account.

3. By omitting both the charge to his account and the credit to sales for personal purchases; or by crediting his account and charging returned goods.

(b) Adjustment of errors must be made by journal entries, debiting and crediting personal account against contra accounts affected. If differences go back for several years, the surplus account will be affected for errors occurring prior to the present period.

(c) Prosecution being contemplated, it is best to let the personal account in the general ledger stand as stated, and open a new account "Personal—Shortage" to which relative items can be transferred. If the officer is under surety bond, the amount received can be credited to this account.

Under no circumstances should book entries be erased or changed. Full details should be given in the adjusting journal entry, or totals may be used with clear references to papers which show the full particulars.

For court prosecution, the working papers should show each item affecting the personal account, giving full particulars of book, page, and line in the books of original entry. The numbers of checks and vouchers should be clearly stated. Checks, vouchers, and bills should be arranged in sequence with entries on the adjusted personal account statement. A statement of personal account should be prepared, showing *all* transactions, in detail, with clear references to related books, vouchers, checks, etc. All books must be available for use in court. Summarized statements (for months or for periods) are useful in proving a defalcation. They should show clearly and simply the methods used, the amounts involved, and the accounts affected. The main con-

sideration is the ability to identify quickly and easily every distinct transaction with the voucher, book entry, or other record pertaining to the transaction.

Question II

What plan would you suggest to minimize the risk of fraud in the following: (a) pay-rolls; (b) cash receipts? (Massachusetts, 1915.)

Answer

(a) Arrange so that fraud would require the collusion of as many persons as possible; for instance, let one person figure the pay-roll, another count it out in envelopes, and a third deliver the envelopes to the employees.

(b) Again use the principle of internal check, and have the receipts handled by more than one person. Do not let the bookkeeper of personal accounts act as cashier. Of course, all receipts should be deposited, but this will not prevent the fraudulent holding out of cash and making no entry, or postponing the entry to a later date, having the use of the cash in the meantime.

GOOD-WILL

Question I

What is your idea of Good-Will account? Would you carry it as a ledger account? State your reasons. (Arkansas, 1915.)

Question II

Under what conditions would you as an auditor accept an item of "Good-Will" as a capital asset in the accounts of a going and paying concern? (Nevada, 1915.)

Question III

Under what circumstances, if any, would it be proper to open an account with good-will? On finding a Good-Will account on the ledger of a business for which you are to prepare an account statement, how would you treat the account or what special adjustment would you suggest in regard to it? (Maine, 1915.)

Answer to Questions I—III

There is no reason why good-will is not an acceptable asset on the books of any concern operating at a rate of profit which justifies the valuation of the account. More conservative writers state that good-will is not a proper asset unless it has been purchased for the amount at which it is valued.

The account Good-Will may be opened at the time of

sale of the entire business, or when taking in a new partner; or, in cases where excess profits are earned on a small capitalization, a Good-Will account may be opened for the purpose of increasing the capital, thus reducing the rate of earnings to a normal return on the capital.

Conservative auditors recommend that good-will be depreciated over a term of years by the creation of a reserve for that purpose by annual charges against profits. This would seem, however, quite inconsistent with the theory that the Good-Will account represents earning capacity and has been valued on a basis of the very profits which are now used to depreciate it. On the other hand, it may be said that such profits have actually been paid for in advance and as earned should be used to pay back the purchase price thereof before dividends are paid.

Question IV

State fully how you would determine the value of the good-will of a business. (Maryland, December, 1915.)

Question V

A desires to sell his wholesale candy business to B, and everything is satisfactory except the valuation of good-will, and they both agree upon you as arbitrator in regard to its worth. How would you determine it? (Delaware, 1915.)

Answer to Questions IV and V

There are two well-known methods of determining the value of good-will. One method commonly used is to capitalize the estimated earnings for a certain number of years. In large consolidations, a period of from two to ten years

has been used as the basis. If a concern showed average net profits of \$10,000, the good-will might be valued at a five years' purchase price of such net profits, or \$50,000.

Another method is to capitalize that portion of the profits which is in excess of the usual return on money not invested in business. Where a concern showed net profits of \$10,000 on a capitalization of \$100,000, the normal profit, if 6% is taken as basis, would be \$6,000, leaving an excess profit of \$4,000. It is assumed that this excess profit is the normal return of the asset good-will; consequently, the value to be placed on good-will equals \$4,000 divided by .06, or \$66,666.67.

Question VI

(a) Is good-will a valuable asset? (b) Does it depreciate with the lapse of time? Explain. (Ohio, 1915.)

Question VII

Is there any reason why the good-will carried as an asset on the books of a prosperous and growing manufacturing concern should be depreciated, amortized, or otherwise written off, and, if so, what would be the effect of such depreciation, amortization, or writing off? (Maine, Maryland [February], and Oregon, 1915.)

Answer to Questions VI and VII

The above questions may best be answered by the following quotations:

"Good-will represents the value of the trade-name, business connections and organization of the undertaking." In case one business is purchased by another, as long as its earnings "are maintainable at not less than the level con-

templated at date of purchase, it is impossible to allege any depreciation of value or the necessity of any provision therefor. On the other hand, if any serious depreciation has taken place, the profits are probably so much reduced that it is not practicable to make such provision. Good-will is in fact a fixed asset whose value is to some extent dependent upon the profits earned, its fluctuations being consequent upon and not a cause of the earning of profits, as are wasting or partially wasting assets, and not therefore to be taken into account in ascertaining them." *

"As to the disposition of good-will authorities differ. Most Americans consider it as an asset of diminishing value. English authorities are divided in their opinions; some of them favor writing it off over a period of years; others advocate its continuance at the cost price irrespective of fluctuations in its value. It is to be borne in mind that it may appreciate in value and the question arises as to whether or not it should be revalued annually. The tendency in the value is to decline and the safest policy to adopt would probably be to make provision for a reserve to offset the item of good-will, the annual amount of the provision depending upon the number of years which the most conservative estimate would fix as its life." †

*"Accounting Practice and Procedure" by Dickinson, page 79.

†"Principles of Accounting" by Wildman, page 146.

HOLDING COMPANIES

Question I

How may the financial condition of a "holding" company, owning all the stock of some subsidiaries and a minority of the stock of others, be intelligently presented; and how should the various stock holdings be shown? (Kansas and Missouri, 1915.)

Answer

A holding company's balance sheet should show all tangible assets of all subsidiaries without duplication, and, where the entire stock of such subsidiaries is owned by the controlling company, such subsidiary companies' stock should be eliminated. With regard to the minority holdings of other subsidiary companies, there are two methods of presenting the facts intelligently:

One method is to include all the assets of such companies in the consolidated balance sheet and show the unowned or majority interest as represented by the proper proportion of the unowned stock on the liability side of the balance sheet.

Another method is to show the par value of the minority stock as an asset of the holding company, with complete information regarding the assets and liabilities and portion of total unowned in a note accompanying the item.

The result to be desired is to reduce all stock holdings in subsidiary companies to the equivalent in assets and liabilities, and show such assets and liabilities on the proper sides of the balance sheet of the holding company merged with other items of like nature.

If the entire stock of a subsidiary company has been acquired at a premium over and above the combined capital stock and surplus of the subsidiary company, a good-will value should be inserted and all of the stock and surplus of the subsidiary company should be eliminated from the balance sheet of the holding company. If the entire stock has not been acquired, then the portion of the unowned stock and surplus should be shown as a separate item on the liability side of the holding company's balance sheet. If acquired at a discount, the difference must be assumed to express the overvaluation of the subsidiary company's assets, and such assets should be stated at cost on the balance sheet of the holding company.

Question II

The Pennsylvania Utilities Company owns \$450,000, out of a total of \$500,000, of the capital stock of the Hamilton Electric Light Company, standing on its books at cost, \$495,000, and all (\$300,000) of the capital stock of the Georgetown Water Company, standing on its books at cost, \$450,000. You are making the regular periodical audit of the holding company and the two sub-companies and find the condition of the latter to be as follows:

Assets

	Hamilton	Georgetown
Cash	\$15,000.00	\$10,000.00
Accounts Receivable.....	45,000.00	35,000.00
Inventories	15,000.00	12,000.00
Deferred Accounts.....	3,500.00	3,600.00
Machinery and Equipment.....	150,000.00	125,000.00
Other Property Accounts.....	528,900.00	434,400.00
	<u>\$757,400.00</u>	<u>\$620,000.00</u>

Liabilities

Bills Payable.....	\$20,000.00	\$25,000.00
Accounts Payable.....	15,000.00	18,000.00
Accrued Accounts.....	2,400.00	2,000.00
Mortgage Bonds.....	200,000.00	150,000.00
Capital Stock.....	500,000.00	300,000.00
Surplus	20,000.00	125,000.00
	\$757,400.00	\$620,000.00

How would you treat these two items in the balance sheet of the Utilities Company? Give in full the comment, if any, in reference thereto you would submit in your report on the holding company. (Pennsylvania, 1915.)

Answer to Question II

There is no objection to carrying the two subsidiary companies on the balance sheet of the holding company at cost, whether the stock of the subsidiaries was purchased for cash or for stock of the holding company. The owned capital stock of the subsidiaries should, however, not be shown on the balance sheet of the controlling company, as this gives no information as to the true condition of the holding company, but should be represented on the balance sheet of the holding company by the specific assets and liabilities of the subsidiary companies. The unowned subsidiary capital stock together with a portion of the subsidiary company's surplus applying to the unowned stock, should be shown separately on the liability side of the holding company's balance sheet.

Assuming the stock of the two subsidiary companies to be the only assets of the holding company, the balance sheet would appear as follows:

PENNSYLVANIA UTILITIES COMPANY

BALANCE SHEET

Assets

Merged Assets of Subsidiaries (in detail).....	\$1,377,400.00
Good-Will	52,000.00
Total Assets.....	<u>\$1,429,400.00</u>

Liabilities and Capital

Merged Liabilities of Subsidiaries (in detail).....	\$432,400.00
Minority Interest Not Owned:	
Stock of Hamilton Electric Light Co.....	50,000.00
Surplus applying to Unowned Stock of Hamilton Electric Light Co.....	2,000.00
Capital Stock Outstanding.....	945,000.00
Total Liabilities and Capital.....	<u>\$1,429,400.00</u>

The comment to be placed in the report accompanying the balance sheet should give a complete explanation of the inclusion of good-will (to meet the value placed on the subsidiaries by the holding company) and a statement of the amount of the owned and unowned stock of the subsidiary companies.

Note that as the holding company only acquired nine-tenths of the stock of the Hamilton Electric Light Company, one-tenth of the capital stock of that subsidiary, i.e., \$50,000, and one-tenth of its surplus applying thereto, i.e., \$2,000, are shown among the liabilities of the holding company.

INCOME TAX

Question I

In auditing the books of a corporation, the president's salary account was found to have been credited with a bonus of \$5,000 for "extra services."

(a) Under what conditions would you pass this entry?

(b) How should this item be treated in making up the income tax returns (1) of the company, (2) of the president? (Massachusetts, 1915.)

Answer

(a) The bonus should have been voted by the board of directors, or by an "executive committee" holding proper authority under such board.

(b) While a gift or gratuity is not deductible as an expense of the corporation (nor taxable to the recipient), there is little doubt that in this case the corporation would return the amount as a salary item, deducting it (as a part of the total salaries) as an expense in the corporation return, and withholding, as a source, \$50 from the Department of Internal Revenue. The president would, of course, return it as an item of salary on which tax has been withheld at the source.

Question II

State how you would treat on the income tax report of a domestic corporation engaged in manufacturing, the fol-

lowing items taken from the balance sheet or the income and profit and loss statement, or both:

- (a) Increase in value of factory real estate shown by appraisal to amount to \$12,000.
- (b) Profit of \$3,200, realized and earned during the year as a result of speculation in "....." stock.
- (c) Loss of \$4,750 suffered during the year as a result of speculation in "....." stock.
- (d) Loss due to decline in market value (based on New York Stock Exchange quotations) of certain bonds held in a reserve fund, said decline amounting to \$1,685.
- (e) Donations of manufactured merchandise to various charitable institutions, during the year, charged at cost, and amounting to \$2,400. (New York, June, 1915.)

Answer

(a) Not shown. It is not the "result of a complete or closed transaction that has been converted into cost or its equivalent." (T. D. 2005 and note.)

(b) This must be shown as income.

(c) This loss cannot be deducted. (T. D. 2005.)

(d) This loss cannot be deducted. "Any shrinkage in the value of stocks and bonds due to fluctuations in the market is not deductible." (Note 5b, Form 1031 revised.)

(e) If the donations are limited to charitable institutions conducted for the benefit of the corporation's employees or their dependents, it is a proper deduction. Otherwise it may not be deducted. *

*See "Income Tax Procedure" by Robert H. Montgomery.

INSTALMENT SALES

Question I

The Good Music Company sells pianos on the instalment basis. On January 2, 1914, Jones purchased a piano from the company for \$375, to be paid for as follows: \$25 down and the balance in quarterly instalments of \$50 each, bill of sale to be given on date of final payment. The piano cost the company \$125. The four instalments for 1914 were duly received, the last one having been paid on December 31.

(a) Set up the proper ledger accounts covering this sale and the payments thereon.

(b) Give the journal entry (at the close of the year) by which the year will be credited with its proper proportion of the profit on this transaction.

(c) Sketch the ruling of a book or books which might be used to facilitate the handling of instalment sales and collections. (Wisconsin, 1915.)

Answer

(a)

JONES

Jan. 2 Instalment Sales..\$375.00	Jan. 2 Cash \$25.00
	April 1 " 50.00
	July 1 " 50.00
	Oct. 1 " 50.00
	Dec. 31 " 50.00
	Dec. 31 Balance 150.00
<u>\$375.00</u>	<u>\$375.00</u>
Jan. 1 Balance.....\$150.00	

INSTALMENT SALES

Jan. 2 Sales.....	\$25.00	Jan. 2 Jones.....	\$375.00
April 1 "	50.00		
July 1 "	50.00		
Oct. 1 "	50.00		
Dec. 31 "	50.00		
Dec. 31 Balance.....	150.00		
	<u>\$375.00</u>		<u>\$375.00</u>
		Jan. 1 Balance.....	\$150.00

SALES

Jan. 2 Instalment Sales	\$25.00
April 1 " "	50.00
July 1 " "	50.00
Oct. 1 " "	50.00
Dec. 31 " "	50.00
	<u>\$225.00</u>

CASH

Jan. 2 Jones.....	\$25.00
April 1 "	50.00
July 1 "	50.00
Oct. 1 "	50.00
Dec. 31 "	50.00
	<u>\$225.00</u>

(b)

Piano Sales.....	\$225.00	
To Piano Purchase.....		\$75.00
" Profit and Loss.....		150.00
To credit Profit and Loss with 3/5 of \$250.		

(c)

The ruling shown below may be used to facilitate the handling of instalment sales and their collections.

RECORD OF INSTALMENT NOTES									
GOOD MUSIC COMPANY									
NAME _____									
ADDRESS _____									
TERMS: _____									
INSTRUMENT _____ NO. _____ PRICE _____									
INSTALMENTS DUE				PAYMENTS				REMARKS	
No.	Date	Amount	Interest	No.	Date	Amount	Interest		
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									

Another card record could be kept showing the name of the customer, the name of the bank through which the collection is to be made, the date the payments are due, a record of collection letters sent, and a space for remarks. These cards could be filed by dates due and would serve as a tickler.

INSTALMENTS

Question I

State in form of journal entries on books of John Brown the following transactions :

- (a) Instalment notes given by him on purchase of real estate; face of notes includes interest charges up to and including maturity of notes.
- (b) Loss collected by him, account of fire, applying on building, fixtures, merchandise. Loss sustained by him over and above insurance carried and the amount collected from the insurance companies.
- (c) Increase in value of real estate.
- (d) Note of John Jones returned from the bank with a protest charge after having been left for collection. (Arkansas and Maine, 1915.)

Answer

(a)

Real Estate.....	\$.....
<u>Interest Paid in Advance.....</u>	.....
To Notes Payable.....	\$.....
(Explanation)	

(b)

Cash (received from Insurance Co.).....	.....
Fire Loss (Profit and Loss).....	.....
To Buildings (for entire amount of loss)	.....
" Fixtures " " " " "	.....
" Mdse. " " " " "	.....
(Explanation)	

(c)

(No entry.)

(d)

John Jones (face of note and protest charge) ..	.....
To Notes Receivable .....	.....
" Expense (protest charge) .....	.....
(Explanation)	

INTERSTATE COMMERCE COMMISSION RULINGS*

Question I

State the accounting procedure prescribed by the Interstate Commerce Commission for telephone companies when acquiring new properties the purchase price of which exceeds the appraised value. (New York, January, 1915.)

Answer

When the property is acquired, an appraisal is to be made. If the cost exceeds the appraisal value, the excess is to be charged to the account "Other Intangible Capital." Full report of the contract of acquisition, the consideration, the determination of the actual money value of such consideration, the appraisal, etc., must be furnished to the Commission.

Question II

The East and West Railroad Company hauled many tons of coal during the year to the various distributing points along its line for the use of the locomotives, and

*See also "Organization Expense," page 324, and "Depreciation," page 222.

upon this company coal \$70,000 freight was charged, such charge being made against the cost of fuel for locomotives and credited to freight earnings. Was the above method of handling this freight item correct? In answering state your reasons fully. (New York, June, 1915.)

Answer

The Interstate Commerce Commission, Accounting Bulletin No. 8, Cases 441 and 476, provides that a carrier transporting material for its own use over its own line may include in the cost of such material the actual cost (fairly estimated) of transporting the material over its own line. The carrier's charges for transportation should be credited to appropriate expense accounts.

By reason of this interpretation, the charging of freight should be on the basis of cost, and credited to an appropriate expense account and not to freight earnings.

INVENTORIES*

Question I

What duties and responsibilities has an auditor in connection with inventories of goods on hand? (Maine and Oregon, 1915.)

Question II

In acting as a special auditor for a merchandising concern what are the duties of such auditor with relation to the inventory? (Nevada, 1915.)

*See also "Auditor's Duties and Responsibilities," page 43.

Question III

Acting as an auditor of a manufacturing company, state briefly the essential points to be considered in ascertaining the correct profits so far as the inventories are concerned. (Maine, 1915.)

Question IV

What duties and responsibilities has an auditor in connection with inventories of goods on hand? Can an examining accountant satisfy himself of the general correctness of inventories without himself taking the quantities and verifying the prices, extensions, and additions? Give full particulars. (South Carolina, 1915.)

Answer to Questions I - IV

An auditor, in addition to examining the original inventory sheets and verifying the mathematical correctness thereof, should also assure himself through the use of all the means at his command of the actual existence of the goods inventoried and of the reasonableness of the quantities and qualities stated. In cases where it is possible partly to verify the existence of the assets by actual inspection, even if only of limited quantities, the auditor is morally responsible for glaring discrepancies.

The English rule is that the auditor is using reasonable care and diligence when he obtains a certificate from a responsible official.

The following rules for verifying inventories are taken from Montgomery's "Auditing, Theory and Practice" (pages 88-91), and are broad enough in scope to cover all the questions stated:

"1. Secure original stock sheets, no matter how rough or soiled they may be. Decline to accept 'fair' copies unless

originals have been destroyed, in which case consider that a prima facie case of concealment has been made out and require strong affirmative proof to account for the missing records.

"2. If not certified to or initialed by the persons who took the stock, by the persons who made the calculations and the footings, and by those who fixed the prices, have this information supplied and see to it that the persons who made the certificates or who supply the information are dependable and take the matter seriously. Insist on a clear and detailed statement in writing as to the method followed in taking and pricing the stock.

"3. Test the calculations, including all large items, and prove the footings. If the inventory is a very extensive one and made up largely of small items, prove the footings by sight, i.e., foot a page or two and use the totals of those pages as a mental guide in looking over the other pages.

"4. Where stock records of prices and quantities, or either one, are kept, compare the totals of the physical inventory with the book figures and trace any material discrepancy.

"5. Where stock records are kept and no physical inventory has been taken, the former must be very carefully investigated as to the method in use, the care taken in carrying out the system and all other features connected therewith which will assist in forming a conclusion. Ascertain when the last physical inventory was taken and compare same with book records. If no recent comparison is possible, select a few book items of importance and personally compare with the things themselves. If discrepancies are found, do not assume, without further proof, that they are clerical errors only. Large thefts of goods have been discovered by tests of this kind.

"6. Ascertain that purchase invoices for all stock in-

cluded in the inventory have been entered on the books. Look for post-dated invoices and give special attention to goods in transit.

"7. Ascertain that nothing is included in the inventory which is not owned, but which is on consignment from others. If goods consigned to others are included, see that cost prices are placed thereon, less a proper allowance for loss, damage, or expenses of possible subsequent return. This does not include goods at branches, as the valuing of such stocks will be governed by the same principles as apply to the head office. Ascertain that nothing is included which has been sold, billed, and is simply awaiting shipment.

"8. If duties, freight, insurance, and other direct charges have been added, test same to ascertain that no error has been made. Duties and freight are legitimate additions to the cost price of goods, but no other items should be added except under unusual circumstances.

"9. Select a fair number of items and compare the inventory *prices* with the most recent purchase invoices for the same kind of goods. If the prices vary, ascertain the average cost of recent purchases.

"10. Make an independent inspection of the inventory sheets to determine whether or not the *quantities* are reasonable, and whether they accord in particular instances with the average consumption and average purchases over a fixed period. . . .

"11. Compare the inventory sheets in a general way with those of the previous period for the purpose of noting any variation in the prices at which similar classes of stock are taken. Classify both periods by commodities of the same class and also by locality.

"12. After this is complete and other parts of the examination about concluded, apply the knowledge so acquired to answering the following questions:

- (a) Is any of the stock damaged, depreciated in quality, or have the styles or shapes changed?
- (b) Is any of the stock obsolete, out of date, of a size or quality no longer used? Have purchases been made in gross or dozen lots to secure a low price, leaving many odds and ends of broken lots?

“13. Scrutinize sales since inventory date and compare some of the items to determine whether there is ample margin between the two prices to cover all expenses of sale and handling, plus a profit. Otherwise it may be inferred that the inventory was padded, and that just cause exists for a more comprehensive examination.”

Question V

- (a) In making an audit, what are the important points to be considered in connection with an inventory?
- (b) Why are they important? (Massachusetts, 1915.)

Answer

(a) The important points in connection with an inventory are those which will insure an accurate total valuation. The subject may be divided under three heads:

1. The quantities listed must be correct.
2. The unit prices must be correct.
3. The computations must be correct.

The third heading, of course, occasions no difficulty. The unit prices of materials may be verified from purchase invoices, or in the case of staples, market prices on the date of the inventory may readily be obtained. Goods in process

and finished goods are to be valued at cost as shown by the cost records, unless such prices are clearly in excess of the market (replacement) value of similar goods, in which case the latter should be used.

Since in ordinary cases the auditor does not himself take the inventory, he must accept the statement of a responsible person that the quantities listed were actually on hand, and that all goods on hand were listed. He should endeavor to satisfy himself that all materials listed had been included in the purchases and that no finished goods listed had been included in the sales.

(b) These matters are important because errors in any of them will result in an incorrect inventory, and hence an incorrect statement of the financial condition of the concern in question, as well as an incorrect amount of profit or loss for the foregoing period.

Question VI

Would you examine the inventory of a firm, in view of the fact that the auditor is not responsible for the inventory? If so, why? If not, why not? (New York, June, 1915.)

Answer

The auditor should examine the inventory of a firm for its *mathematical accuracy*. The question states that the auditor is not responsible for the inventory, but this refers only to the physical contents; the inventory is a part of the accounting records and it is an auditor's duty to examine all accounting records for errors in calculation.

Question VII

An auditor is required to certify to the correctness and value of an inventory with which he is unfamiliar. Should he decline to do so? Give reasons. (Ohio, 1915.)

Answer

He should not decline to certify to the correctness of an inventory, but should not make himself responsible for quantity and value, unless he has had his own staff take the inventory. He should limit his certificate as to inventories to those matters that he can actually verify.

Question VIII

It is generally conceded that merchandise inventories should be calculated on "cost" prices, but in practice there are found many differences in the method of determining the cost price.

State whether or not the following items should be regarded in arriving at this cost, giving your reason in each case:

- Cash discounts
- Trade discounts
- Freight inward (on goods bought)
- Freight outward (on goods sold)
- Rebates and premiums, such as are found in connection with the tobacco business.
- Drayage and handling (inward)
- Packing and draying (outward) (Florida, 1915.)

Answer

you're crazy Cash discounts, according to economic theory, are considered as interest and therefore should not be deducted from the cost price. However, where a concern is in the habit of taking all cash discounts to the extent that the cash discount is deducted before the bill is entered, the bill being paid as soon as it is entered, it would seem quite proper to consider the net cost of the invoice as the proper inventory price.

Trade discounts should always be deducted from the invoice in arriving at the inventory cost.

Freight inward on goods bought is a proper addition to the cost of goods on hand. It is a "value of place." If the exact amount of freight inward on specific goods is known, this amount may be added to the cost. In many cases, however, the exact amount is not known and the freight is then figured as an overhead expense.

Freight outward on goods sold should not be added to the cost of finished goods unless paid in advance. As it rarely occurs that freight on goods sold is paid in advance unless a corresponding charge has already been entered against the customer, it may be said the freight outward has nothing to do with the cost of finished goods.

Rebates and premiums, if allowed to the company whose inventory is under inspection, should be deducted from the price paid for goods on hand, as similar to a trade discount.

Drayage and handling (inward) are proper additions to the invoice cost of materials on hand and should be considered in costing such goods, being items similar to freight inward.

Packing and draying (outward) on goods sold should not be considered, as the goods are not to be inventoried. On goods packed and carted to a stockhouse, they may be considered as a proper addition to factory costs or even

as a part of such costs, thus constituting a final process of manufacture necessary to place the goods in salable condition.

Question IX

In making an examination of the accounts of a manufacturing concern for a period of five years, you suspect that one of the inventories has been inflated. How would you proceed to verify this? (New York [January] and Maryland [December] 1915.)

Answer

In the usual order of business, profit is a fairly fixed percentage. Given the inventory at the beginning of the year, the purchases, the sales, and the final inventory, the profit on sales can be calculated. In the case referred to, having the accounts for five years in hand, the percentage of profit can be computed for each year, and unless there has been some extraordinary profit, these percentages should be approximately the same each year.

If it is found that the percentages of profit are about equal for each of the five years and there is still suspicion that one of the inventories has been inflated, the accountant should proceed as follows:

1. As to Quantities. The accountant should take steps to satisfy himself regarding the actual quantities on hand at inventory time. This may not always be possible; but if confirmation of the quantities on hand at a particular time could be obtained from reliable sources which are also independent of the influence of the person who took the original inventory, much good would be obtained.

The next thing is to compare the quantities very closely with those held on similar dates in other years.

2. As to Prices. Being satisfied as to the quantities, their valuation must be ascertained. Here the accountant will take the following precautionary measures to see that there has been no departure from the proper custom:

- (a) He will check prices with a large number of invoices to see that no merchandise is included above cost.
- (b) He will see that old or obsolete material has not been carried from year to year at the same price. Such material must be properly depreciated.
- (c) In cases where it is not possible to check with invoices, the items or class of items at issue should be carefully compared with other years to reveal discrepancies in prices.

Question X

From the audit of the John Jones Manufacturing Company it is found that owing to the war there was an abnormal drop in the market value of the inventories at the close of the fiscal year, December 31, 1914, and that the market value of the stock on hand was \$50,000 less than the cost value. The company has prepared its balance sheet, stating the inventories at cost value, and wishes to publish it in that form with the accountant's certificate.

Draft your certificate, as auditor, to the balance sheet under these conditions. (Massachusetts, 1915.)

Answer

The certificate may be drawn up in the following manner:

I hereby certify that I have audited the books and accounts of the John Jones Manufacturing Company for the period of one year ending December 31, 1914.

The inventories have been taken and figured by the staff of the company, and are certified by the treasurer as correct, figured at cost. Owing to the abnormal drop in the market, the cost value of the inventories is \$50,000 in excess of the market value on December 31, 1914.

Proper provision has been made for depreciation of the fixed assets and for doubtful accounts; and subject to the above comment on the value of the inventories, I certify that the attached balance sheet in my opinion correctly represents the financial condition of the John Jones Manufacturing Company as of December 31, 1914.

Yours very truly,

....., C.P.A.

Question XI

A small firm is engaged in the business of hat manufacturing. The accounts do not embrace a cost system, although one could readily be installed, as the labor is on a piece-work basis and the goods manufactured are standard, requiring a given quantity of braid, thread, etc., per dozen.

The firm closed its books showing a loss of \$10,000 for the year, the inventory, which aggregated \$45,000, being taken by actual count and priced at estimated cost. You were engaged to audit the accounts, and during the progress of your audit the firm informed you that \$8,000 worth of finished goods had been omitted from the inventory, giving you the case numbers. What steps would you take to verify the adjusted inventory? (Pennsylvania, 1915.)

Answer

If it is not possible to check the existence of the cases by actual inspection, the auditor should set up manufacturing accounts by amounts and quantities. Thus the purchases

of raw material by classes added to the inventory at the beginning of the period and diminished by the inventory at the end of the period should produce a certain quantity of finished goods. This is true if the quantities required are standard.

The pay-rolls should also prove, by piece rates, the manufacture of finished goods for the period. If such quantities of finished goods were adjusted by the inventory of finished goods on hand at the beginning of the period, the total should equal the total of finished articles sold during the period plus the correct inventory at the end of the period. The determination of the amount required, which added to the sales shall equal the total of production available for sale, shall be the proof of the existence of the quantity to be verified.

Question XII

The board of directors of the X Y Z Company removed their manager on April 30, 1915, on the general suspicion that his books misrepresented the true financial condition of the business. Prepare a statement showing the nature and the probable extent of the misrepresentation, also an approximate statement of income and profit and loss for the four months ending April 30, 1915, and a balance sheet as of April 30, 1915.

The following is a trial balance taken from the books April 30, 1915:

Capital Stock.....		\$75,000.00
Fixtures	\$10,000.00	
Inventory, January 1, 1915.....	128,600.00	
Cash	15,450.00	
Accounts Receivable.....	24,600.00	

INVENTORIES

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Accounts Payable.....		39,000.00
Loans Payable.....		10,000.00
Sales		51,000.00
Purchases	40,700.00	
Salaries, Salesmen.....	2,200.00	
Advertising	1,650.00	
Salaries, Office.....	1,100.00	
Rent	400.00	
Interest	200.00	
Insurance, January 1 to December 31, 1915....	999.00	
Stationery and Printing.....	105.00	
Reserve for Depreciation of Fixtures.....		2,710.00
Surplus, January 1, 1915.....		48,294.00
	<u>\$226,004.00</u>	<u>\$226,004.00</u>

An analysis of the Purchases and Sales accounts revealed the following: purchases, year 1912, \$122,000; sales, year 1912, \$153,750; inventory, January 1, 1912, \$101,000; purchases, year 1913, \$123,000; sales, year 1913, \$153,170; inventory, January 1, 1913, \$100,000; purchases, year 1914, \$121,000; sales, year 1914, \$154,722; inventory, January 1, 1914, \$102,000. (New York, January, 1915.)

Answer to Question XII

The following schedule establishes the theoretical inventory of April 30, 1915, and corrects the inflated inventory of January 1, 1915, on the basis of gross profits of prior periods, and of the relation of purchases and sales as between different periods.

X Y Z COMPANY

	Year Ended Dec. 31, 1912	Year Ended Dec. 31, 1913	Year Ended Dec. 31, 1914	4 Months Ended Apr. 30, 1915
Initial Inventory.....	\$101,000.00	\$100,000.00	\$102,000.00	\$99,997.56
Purchases of the Period.....	122,000.00	123,000.00	121,000.00	40,700.00
Total Inventory and Purchases.....	<u>\$223,000.00</u>	<u>\$223,000.00</u>	<u>\$223,000.00</u>	<u>\$140,697.56</u>
Sales of the Period.....	\$153,750.00	\$153,170.00	\$154,722.00	\$51,000.00
Deduct Gross Profit.....	<u>30,750.00</u>	<u>32,170.00</u>	<u>31,719.56</u>	<u>10,455.51</u>
	(Actual 20%)	(Actual 21.003%)	(Average 20.501%)	(Average 20.501%)
Cost of Goods Sold during the Period	\$123,000.00	\$121,000.00	\$123,002.44	\$40,544.49
Closing Inventory.....	<u>\$100,000.00</u>	<u>\$102,000.00</u>	<u>\$99,997.56*</u>	<u>\$100,153.07</u>

*Inventory by the manager was \$128,600, which shows a gross profit of 38.98%, although initial inventory, purchases, and sales of the period are about the same as the corresponding factors of the prior period.

RECONCILIATION OF SURPLUS AS AT JANUARY 1, 1915

Surplus as per financial statements established by the manager	\$48,294.00
Deduct inflation of inventory of merchandise at January 1, 1915:	
Original Inventory.....	\$128,600.00
Corrected Inventory.....	99,997.56
Balance.....	<u>\$19,691.56</u>

INVENTORIES

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X Y Z COMPANY
EXHIBIT A
GENERAL BALANCE SHEET AT APRIL 30, 1915

Capital Assets:		Capital Stock.....	\$75,000.00
Fixtures	\$10,000.00	Current Liabilities:	
Working and Trading Assets:		Loans Payable.....	10,000.00
Inventory of Merchandise (as per		Accounts Payable.....	39,000.00
schedule submitted).....	100,153.07	Surplus:	
Current Assets:		Appropriated:	
Cash	15,450.00	Reserve for Depreciation of Fixtures	3,011.11
Accounts Receivable.....	24,600.00	Available for Dividends:	
Deferred Debit Items:		1. As per books at April	
Insurance Premiums Unexpired.....	666.00	30, 1915.....	\$48,294.00
		Less Inflation of Inven-	
		tory of January 1, 1915..	28,602.44
		Corrected amount.....	\$19,691.56
		2. Earned during four	
		months ended April 30,	
		1915—Exhibit B.....	4,166.40
			23,857.96
			<u>\$150,869.07</u>
			<u><u>\$150,869.07</u></u>

EXHIBIT B

STATEMENT OF INCOME AND PROFIT & LOSS

For the Four Months Ended April 30, 1915

Sales		\$51,000.00
Cost of Goods Sold:		
Initial Inventory, January 1, 1915 (corrected— see Schedule)	\$99,997.56	
Purchases of the Period	40,700.00	
Total	\$140,697.56	
Closing Inventory, April 30, 1915 (estimated— see Schedule)	100,153.07	
Cost of Merchandise Sold		40,544.49
Gross Profit on Sales		\$10,455.51
Selling Expense:		
Salaries of Salesmen	\$2,200.00	
Advertising	1,650.00	3,850.00
Selling Profit		\$6,605.51
Administration Expense:		
Office Salaries	\$1,100.00	
Stationery and Printing	105.00	1,205.00
Profit from Operations		\$5,400.51
Deduction from Income:		
Interest	\$200.00	
Rent	400.00	
Insurance	333.00	933.00
Net Profit from All Sources		\$4,467.51
Appropriation for Reserve for Furniture and Fixtures		301.11
Profit and Loss Surplus for four months ended April 30, 1915		\$4,166.40
Surplus Earned to December 31, 1914 (as per books)	\$48,294.00	
Less Inflation of Inventory, as per Schedule attached	28,602.44	19,691.56
Surplus Available for Dividends, April 30, 1915—Exhibit A ..		<u>\$23,857.96</u>

INVOICES

Question I

When auditing the books of a firm you find that no invoice transactions are recorded on the firm's books until they have matured. Give your opinion upon this method and show how the balance sheet of the firm would be affected. (Washington, 1915.)

Answer

In a concern where the above method is followed, it will be necessary for the auditor to set up unpaid invoices in an adjusting entry at the close of the fiscal year. The entry would be to charge the appropriate expense or asset accounts and credit the unpaid vendors.

It is considered better accounting practice to enter invoices as received, thus charging the purchase to the period in which it is absorbed and entering the liability as it is incurred.

Where invoices are omitted, if a proper adjustment is not made at the end of the accounting period, the balance sheet will not exhibit the correct amount of debts due to creditors, while the inventories may include the goods purchased.

JOINT VENTURES

Question I

Plant & Company and Edwards & Company ship merchandise to South America on joint account. Edwards & Company gave Plant & Company \$1,200 in cash and their acceptances at six months for \$3,000. Plant & Company were to provide balance of cash required, to manage the venture and to receive a commission of 2% on amount of invoice for merchandise. The profits are to be divided equally.

Plant & Company paid Smith & Greer for merchandise \$5,000, and discounted Edwards & Company's acceptances for \$3,000, at 2% discount. Plant & Company prepaid freight \$420, insurance \$60. In due time Plant & Company received from South America an account sales for merchandise and a draft for the net proceeds, payable in London for \$3,200, out of which Plant & Company paid \$3,000 to retire bills for that amount.

Later Plant & Company received a draft for \$3,100 being balance of proceeds of sale of merchandise. The joint account with Edwards & Company was closed and a check for the balance due them was paid to Edwards & Company.

Prepare a statement showing details of the joint account, also a statement of Edwards & Company's account. (New York, June, 1915.)

Answer to Question I

PLANT & COMPANY AND EDWARDS & COMPANY

JOINT ACCOUNT

Proceeds from Sales:

First Draft.....	\$3,200.00
Second Draft.....	3,100.00

Total Proceeds from Sales..... \$6,300.00

Disbursements:

Smith & Greer, for Merchandise.....	\$5,000.00
Freight	420.00
Insurance	60.00
Commission, 2% on Invoice of Merchandise....	100.00

Total Disbursements..... 5,580.00

Net Profit on Venture..... \$720.00

Net Profit on Venture Apportioned as Follows:

Plant & Company.....	\$360.00
Edwards & Company.....	360.00

\$720.00

EDWARDS & COMPANY

Debits

Date	Complementary Account	Particulars	Amount
	Acceptances	Discount Lost	\$60.00
	Cash	Acceptances Paid	3,000.00
	Cash	To balance account	1,500.00
			<u>\$4,560.00</u>

Credits

Date	Complementary Account	Particulars	Amount
	Cash	Joint Venture Acct.	\$1,200.00
	Acceptances	" " "	3,000.00
	Joint Account	Profit	360.00
			\$4,560.00

JOURNAL

Question I

Is the use of debit and credit columns in journals essentially an attribute of either the single-entry or the double-entry system of bookkeeping? Give reasons based on historic development. (New York, January, 1915.)

Answer

The use of debit and credit columns in journals is neither the attribute of single or double entry. Both methods could use indiscriminately either one journal column or two journal columns.

Originally both systems used one column, the debit being marked "Dr." alongside of the amount, and the credit being marked "Cr." John of Bristol was the first to suggest that in order to carry out double-entry principles the double-entry journal should have two columns, one for the debits, the other for the credits.

Question II

How may a journal be utilized for recording invoices for purchases and expenses, when the number of expense accounts involved renders a columnar book unfeasible, if the chronologic recording of transactions and one monthly posting to both Creditors Controlling account and Purchases are permitted? (New York, January, 1915.)

Answer

Under the conditions named, the journal may be utilized as follows:

Date of Receipt	Date of Invoice	No. of Invoice	Name of Creditor	Ledger Folio	Amount of Invoice

Left half
Distribution

Purchase Invoices	Expense Invoices		
	Account	Folio	Amount
(1)			(2)

Right half

Post the total of column No. 1 to Purchases and to "Creditors for Merchandise."

Post the result of the analysis of column No. 2 to the debit of the different accounts affected and to "Creditors for Expense."

LEDGER EXPLANATIONS

Question I

What rules should govern ledger explanations? (New York, January, 1915.)

Answer

To make a general ledger most valuable, the explanation inserted in the column provided therefor must be the name of the account carrying the contra element of the journal entry. When the debit to one account is offset by credits to several accounts (or *vice versa*), the explanation "Sundry" is used and this necessitates reference to the journal giving the detail. A ledger kept as suggested above can be checked almost in its entirety on its face.

LIFE INSURANCE OF PARTNERS

Question I

The partnership "Black & White" has insured the lives of its partners for equal amounts. The policies are payable to the firm. Premiums have been paid for five years.

(a) Show the annual entries for each of the five years.

(b) At the end of the fifth year White dies. What would be the proper entries to make upon receipt of the amount of the policy? (Wisconsin, 1915.)

Answer

Assume the policies to be straight life policies. The entire amount of the premiums should be charged to Operating Expense for such a period as the policies are without surrender value. Thereafter the difference between the amount of the premiums and the increase in the surrender values should be charged to Operating Expense. If the increase in surrender value is greater than one year's premium, credit should be made to Profit and Loss. The policies will have a surrender value at the end of the second year.

(a)

First year:

Insurance	\$.....	
To Cash.....		\$.....
Premiums on policies.		

Second year:

Insurance	\$.....	
To Cash.....		\$.....
Premiums on policies.		

At end of second year:

Surrender Value.....	\$.....	
To Insurance.....		\$.....
Amount of surrender value.		

Third year:

Insurance	\$.....	
To Cash.....		\$.....
Premiums on policies.		

At end of third year:

Surrender Value.....	\$.....	
To Insurance.....		\$.....
Increase of surrender value.		

Fourth and fifth years same as third.

(b)

Cash	\$.....	
To Surrender Value.....		\$.....
" Profit and Loss.....		.....

The policies were payable to the firm, hence the excess of insurance money received over amount of surrender value is credited to the firm's Profit and Loss account.

LOSSES SUSTAINED DURING STRIKE

Question I

A textile manufacturer operated his mill during a strike period extending from February 4, 1914, to July 8, 1914. The losses sustained by him during this period are to be compensated for by a manufacturers' association and the parties agreed to the following:

The mill has 80 looms but the percentage of loss is to be based on a standard of 60 looms, and only 75% of the looms which were operated are to be considered, in the adjustment of the loss, as having been in operation. The remaining looms are the basis for compensation.

Fixed charges were \$29,263 per annum. A further loss of \$4,112.45 occurred by reason of excess charges paid on loom labor, and there was a loss of materials from theft and carelessness of strike-breakers amounting to \$500.

The total productive loom hours accomplished were 43,064. The maximum hours per loom were 1,200. The normal production, at mill cost, would be \$119,203.47. Five per cent on actual loss of production was also to be paid.

Prepare a statement showing what the manufacturer is entitled to. (New York, January, 1915.)

Answer

BASIC DATA

Duration of the strike.....	154 days
Number of looms owned.....	80 looms
Basis for percentage of loss.....	60 looms
Maximum productive hours per loom in normal times...	1,200 hours
Number of productive loom hours accomplished during strike.....	43,064 hours
Number of looms operated during strike:	
43,064 ÷ 1,200 equals $35 \frac{1064}{1200}$ or	$\left\{ \begin{array}{l} 35 \text{ looms @} \dots\dots 1,200 \text{ hours} \\ 1 \text{ loom @} \dots\dots 1,064 \text{ hours} \\ \hline 36 \text{ looms} \end{array} \right.$
Percentage of looms to be considered as operated.....	75% of actual
Number of looms operated as per agreement (75% of 36)	27 looms
Number of looms to be considered as not operated (60-27)	33 looms
Fixed charges amounting to \$29,263 ÷ 360 equals \$81.29 per day.	
\$81.29 × 154 days equals.....	\$12,518.66
Fixed charges of the strike period applicable to each of the 60 looms considered as the standard:	
\$12,518.66 ÷ 60 equals.....	\$208.64 per loom
Production in normal times (at cost).....	\$119,203.47
Production per loom (standard of 60).....	\$1,986.72

STATEMENT OF LOSS

SUSTAINED BY THE MANUFACTURER

Loss of production through idleness of 33 looms @ \$1,986.72 equals \$65,561.76, of which 5% is allowed, equaling.....	\$3,278.09
Excess labor paid on looms operated during the strike.....	4,112.45
Loss through theft or carelessness of strike-breakers.....	500.00
Fixed charges on investment not earned because of looms remaining idle during the strike, equals 33 looms @ \$208.64.....	6,885.12
Total loss claimed.....	<u><u>\$14,775.66</u></u>

MERCHANDISE LOST IN TRANSIT

Question I

The A B C Manufacturing Company shipped a bill of goods amounting to \$300 to a customer, rendering the usual invoice therefor. The goods were destroyed in transit by a railway wreck. The A B C Company subsequently made a second shipment to its customer to replace the lost goods, and collected \$300 from the railway company in payment of the lost shipment. To what account should this last \$300 be credited? (New York, June, 1915.)

Answer

The above transactions are covered by the following entries:

When the goods are shipped:

Customer.....	\$300.00	
To Sales.....		\$300.00

When the goods are destroyed:

Sales.....	\$300.00	
To Customer.....		\$300.00

Railroad Company.....	\$300.00	
To Goods Sold (Lost in Transit).....		\$300.00

When second shipment is made to the customer:

Customer.....	\$300.00	
To Sales.....		\$300.00

When damage is collected from the railroad company:

Cash.....	\$300.00	
To Railroad Company.....		\$300.00

In specific answer to the examination question, the \$300 collected from the Railroad Company is in reality credited to "Goods Sold (Lost in Transit)."

MORTGAGES

Question I

(a) How would you satisfy yourself that the assets of a company were not mortgaged or encumbered in any way?

(b) If an asset were so mortgaged, would you state this fact on the balance sheet? (Wisconsin, 1915.)

Answer

(a) If no record of transfer of title or encumbrance is found on the books of account or on the minute book, and if no such record is produced on request, the auditor must examine the files in the office of the registrar of deeds.

(b) The usual practice is to list the asset as such, while the mortgage would be listed as a liability. It is scarcely conceivable that the mortgage would not be mentioned in the balance sheet; yet if it were omitted, attention should be called to the fact in a footnote accompanying the balance sheet.

MUNICIPAL ACCOUNTS

Question I

What in your opinion is the difference between the balance sheet of a municipality and of a commercial corporation? (Washington, 1915.)

Answer

If it were not for the so-called fund accounts which appear on some municipal balance sheets, there would not be any essential difference between the accounts appearing on the balance sheet of a city and those appearing on a balance sheet of a commercial corporation. The taxes receivable correspond to the accounts receivable, and the vouchers, notes, and bonds outstanding correspond to the liabilities on a commercial balance sheet. The inventories and plant can be set up in the usual manner. However, such authorizations for expenditures as remain unencumbered at the time of the balance sheet may be set up, in which case an entirely different set of accounts is presented from those appearing on a commercial balance sheet.

Question II

In auditing the accounts of a state, a county, or a municipal corporation, what essential knowledge is required other than that necessary for the audit of a private business enterprise. (Nevada, 1915.)

Answer

A knowledge of state, county, or municipal administration is needed in order to understand how the different departments, offices, bureaus, and other administrative units are organized and what the function of each is. Furthermore, a knowledge of governmental procedure is needed in order to know how the routine of government business is carried on.

In addition to the foregoing, a knowledge of such laws,

acts, and ordinances as pertain to the funds and expenditures should be obtained. In some cases the minutes and proceedings of various boards should be consulted in order to ascertain what action had been taken in authorizing funds. Sometimes, all court cases should be looked up and decisions noted. An example of the technical knowledge required in examining municipal statements would be the statement of the debt limit prepared by the chief accountant for the City of New York.

Question III

A municipality derives its revenue from taxation.

The valuation of its assessable property is as follows:

Real Property.....	\$40,350,000.00
Personal Property.....	4,100,000.00
Total Valuation.....	<u>\$44,450,000.00</u>

The estimated expenses for 1915 are as follows:

Police Department.....	\$96,975.00
Fire Department.....	96,000.00
Street Department.....	48,500.00
Sewer Department.....	39,400.00
Health Department.....	15,000.00
Other Departments.....	37,500.00
	<u>\$333,375.00</u>

Besides meeting these expenses, the city must provide for the interest on its bond debt of \$1,333,500, which bears 5%; for its parks and library, for which the charter says one-half of a mill tax for each must be levied, and also one mill tax for a sinking fund for the redemption of its bonds.

Prepare a statement giving the tax levy in mills and amounts to produce sufficient money for the separate funds, viz:

General Fund
Interest Fund
Park Fund
Library Fund
Sinking Fund (Washington, 1915)

Answer to Question III

		Tax Levy in Mills
General Expense.....	\$333,375.00	7.5
Interest	66,675.00	1.5
Park Fund.....	22,225.00	.5
Library Fund.....	22,225.00	.5
Sinking Fund.....	44,450.00	1.0
	\$488,950.00	11.0

Proof: $\$44,450,000 \times .011 = \$488,950$

Question IV

Describe the form of balance sheet you think best suited to present the financial position of a city of, say, 100,000 inhabitants owning its own waterworks but not owning its lighting or other public utilities. In presenting your answer, draft a balance sheet supplying figures or not, as you prefer, and in your text describe the several groups of accounts shown on the municipal balance sheet and, where they differ from those found in the balance sheet of a business corporation, point out the reasons for, and the extent of, the variation. (Pennsylvania, 1915.)

Answer

CONSOLIDATED BALANCE SHEET

Date.....

PART 1—FUND ACCOUNTS

Requirements:		Amortization:	
Budget Requirements.... \$....		Appropriations..... \$....	
Construction Fund Re-		Construction Fund Au-	
quirements		thorizations.....	
Surplus:		Reserves:	
Unapplied Surplus.....		Contract Reserve.....	
Available Cash Surplus..		Open Market Orders Re-	
		serve	
Total..... \$....		Total..... \$....	

PART 2—PROPRIETARY ACCOUNTS

<i>Assets</i>		<i>Liabilities</i>	
Cash and Securities:		Current Liabilities:	
Cash	\$....	Vouchers Payable.....	\$....
Investments.....		Pay-Rolls Payable.....	
Accounts Receivable:		Loans:	
Taxes—Real Estate.....		Revenue Bonds.....	
Taxes—Personal.....		Assessment Bonds.....	
Departmental Accounts:		Reserves:	
Water Rates Receivable..		Stores Reserve.....	
Property..... \$....		Surplus	
Less Depreciation..			
Suspense:			
Stores			
Total Assets..... \$....		Total Liabilities..... \$....	

The accounts on the pro forma balance sheet shown herewith are classified under two general headings known as fund accounts and as proprietary accounts. The former

class has to do with the authorization for current expenses and construction, and reserves against them, while the latter class has to do with those assets and liabilities which are analogous to those of a commercial corporation.

Question V

Submit pro forma entries required to record properly in the fund and other accounts in the books of a municipality the following transactions, stating source of entry in each case:

1. Annual budget appropriations.
2. Unappropriated revenues, appropriated to reduce taxation.
3. Taxes levied—amount required to cover appropriation.
4. Taxes levied—amount levied in excess of appropriation requirements.
5. Cash receipts—taxes.
6. Cash receipts—assessments.
7. Assessments confirmed—local improvements.
8. Taxes cancelled.
9. Assessments cancelled—local improvements.
10. Open market orders issued.
11. Open market orders cleared.
12. Vouchers registered, for refunds of taxes.
13. Vouchers registered, for payments out of unappropriated revenues. (Minnesota, 1915.)

Answer

(1)

Budget Requirements.....	\$.....	
To Appropriations, 1916 (Detail below) ..		\$.....
Per ordinance of Board of Aldermen.		

(2)

Unappropriated Revenue (name of account).....	.....
To General Fund for the Reduction of	
Taxation .....	.....
Per schedule of items.	

(3)

Taxes Receivable, 1916.....	.....
To Revenue—General Government.....	.....
Unapplied Surplus.....	.....
To Budget Requirements.....	.....
Per register of tax rolls, 1916.	

(4)

Taxes Receivable.....	.....
To General Fund for the Reduction of	
Taxation (or Reserve for Abatement	
of Taxes).....	.....
Per estimate of amount of taxes levied in	
excess of requirements.	

(5)

Cash .....	.....
To Taxes Receivable, 1916.....	.....
Available Cash Surplus.....	.....
To Unapplied Surplus.....	.....
Per register of collections.	

(6)

Cash—Capital .....	.....
To Street Paving Assessments.....	.....
Per register of collections.	

(7)

Street Paving Assessments.....	.....
To Capital Surplus.....	.....
Per register of assessments levied on prop-	
erty owners.	

(8)

Reserve for Abatement of Taxes.....	.....
To Taxes Receivable.....	.....
Per resolution of board abating taxes.	

(9)

Capital Surplus.....	.....
To Street Paving Assessments.....	.....
Per record of assessments cancelled.	

(10)

Appropriations, 1916.....	.....
To Open Market Orders Reserve.....	.....
Per register of open market orders.	

(11)

Expense .....	.....
To Vouchers Payable.....	.....

Open Market Orders Reserve.....	.....
To Available Cash Surplus.....	.....
Per register of open market orders.	

(12)

Sundries .....	.....
To Vouchers Payable.....	.....
Per register of vouchers.	

Miscellaneous Claims Reserve.....	.....
To Available Cash Surplus.....	.....

(13)

Reserve for Current Claims.....	.....
To Current Vouchers Payable.....	.....
Amount of special claims vouchered for payment.	

ORGANIZATION EXPENSES

Question I

State the prescribed procedure in handling organization expenses by (a) the Interstate Commerce Commission, (b) the Public Service Commission of New York. (New York, January, 1915.)

Answer

(a) The Interstate Commerce Commission requires that organization expenses be included in the cost of construction and equipment.*

(b) This account must be charged with all fees paid to government for organization; the cost of preparing and distributing prospectuses, cost of soliciting subscriptions for stock; cash fees paid to promoters and the actual cash value of the securities issued to them, i.e., cost of printing, etc.; the outlay for counsel fees; the cost of preparing and issuing certificates of stock; cost incident to the increase of capital stock; etc. The account cannot include discounts upon stocks or other securities.

The portion of the account which it is desired to write off is debited to the expense account "General Amortization," which is a sub-caption of the group account "General and Miscellaneous."

*"Applied Theory of Accounts," by Esquerré, page 317.

Question II

To what extent may the "organization expenses" of a corporation be regarded as a permanent asset and how should this account accordingly be dealt with? (Maine, 1915.)

Answer

If the organization expenses affect more than one year's operation, they may be spread over the entire period affected, and the unabsorbed portion at the end of any period is a valid asset for balance sheet purposes. It is more conservative, however, to eliminate the account as soon as feasible. Organization Expense is a prescribed account in the accounting requirements of the New York Public Service Commission. Montgomery states that it is permissible to spread organization expenses over a term of years, preferably three, and not more than five. Dicksee advises conservatism. The Italian law, however, does not permit the corporation to write off organization expenses otherwise than proportionately during its official life, which in Italy extends over fifty years.

PARTNERSHIP ACCOUNTS

Question I

The firm of A & B began business on January 1, 1912, the terms of the partnership contract specifying that no interest was to be credited on investments or charged on withdrawals, and all profits or losses were to be shared equally. A invested \$24,000 and B \$15,000.

On November 30, 1914, the partnership was dissolved, and as the books had not been properly kept, the following statement was submitted to the partners as a basis for settlement, and agreed to by them: cash, \$14,200; net debit of A, \$6,300; expenses, \$15,300; net credit of B, \$10,500; profit and loss, debit, \$9,000; credit, \$1,500; real estate having an estimated market value of \$3,300; the bank holds firm's six months' 6% note for \$10,000, due January 31, 1915, on which interest is unpaid.

B liquidated the assets and liabilities and in due course sold the real estate for \$4,000 and paid off the note when due.

Prepare the partners' accounts as of November 30, 1914, and as of the close of liquidation, and a balance sheet as of November 30, 1914. (New York, January, 1915.)

Answer to Question I

Comments on the Problem, Explaining the Solution Presented

The resources of the copartnership of A & B from January 1, 1912, to November 30, 1914, have been, according to the data given by the problem:

PARTNERSHIP ACCOUNTS

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Resources:

A's contribution, assumed to have been cash..	\$24,000.00
B's contribution, " " " " " ..	15,000.00
Funds obtained on notes.....	10,000.00

Total	\$49,000.00
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The application of the above resources has been as follows:

To acquire real estate:

Market value at Nov. 30, 1914..	\$3,300.00	
Less profit and loss credit, assumed to be the excess of market value over cost.....	1,500.00	\$1,800.00

To pay expenses (as per statement submitted to partners).....	15,300.00
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To meet A's withdrawal of capital, as follows:

Originally contributed.....	\$24,000.00
Loss of \$9,000, divided equally between partners.....	4,500.00

Remainder	\$19,500.00
Debit balance at November 30..	6,300.00

Total withdrawn.....	25,800.00
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\$42,900.00

Resources lost by B, shown by his capital account, as follows:

Originally contributed.....	\$15,000.00
Less 50% of loss of \$9,000....	4,500.00

Balance at November 30.....	\$10,500.00
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Hence, loss of.....	4,500.00
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Resources lost by A, as shown by his capital account	4,500.00
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Total application of resources.....	51,900.00
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Excess of application over resources.....	\$2,900.00
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Thus, on the facts given by the problem, and on the assumption that "Net Debit of A" and "Net Credit of B"

refer to the capital accounts of the partners, the business has applied \$2,900 more than it could marshal in the line of resources. This would seem to indicate that the partners would have a cash overdraft of \$2,900. In reality they have a cash balance of \$14,200. This being true, it must be that resources of \$14,200 plus \$2,900 (i.e., \$17,100) were received in the line of profits on sales. Thus we are able to reconstitute the trial balance of the books at November 30, 1914, as follows:

TRIAL BALANCE

Dr.

Cash	\$14,200.00	
Real Estate (market value).....	3,300.00	
Expenses	15,300.00	
Interest on Promissory Note.....	200.00	
Losses (nature unknown).....	9,000.00	
A's Capital Account (overdrawn):		
Balance given.....	\$6,300.00	
Less 50% of loss of \$9,000.....	4,500.00	1,800.00
		<u>\$43,800.00</u>

Cr.

Capital of B:		
Balance given.....	\$10,500.00	
Plus loss of \$4,500 charged to it.....	4,500.00	\$15,000.00
Promissory Note.....		10,000.00
Interest Accrued on Note.....		200.00
Gain on Real Estate (market value).....		1,500.00
Merchandise Gains.....		17,100.00
		<u>\$43,800.00</u>

The foregoing data being established, we reconstitute the following ledger accounts:

LEDGER ACCOUNTS

(Not required by the problem)

CASH

1914		1915	
Nov. 30	Balance..... \$14,200.00	Jan. 31	Note Payable.. \$10,000.00
1915			Interest on Note 300.00
Jan. 31	Sale of Building 4,000.00		B—Partner, as
	A—Partner, as		per his capital
	per his capital		account 12,350.00
	account 4,450.00		
	<u>\$22,650.00</u>		<u>\$22,650.00</u>

PROFIT AND LOSS

1914		1914	
Nov. 30	Loss (nature	Nov. 30	Gain on Real
	unknown) ... \$9,000.00		Estate Value.. \$1,500.00
	Interest on Note 200.00		Merchandise
	Expenses 15,300.00		Gains..... 17,100.00
			A's Capital, 50% 2,950.00
			B's Capital, 50% 2,950.00
	<u>\$24,500.00</u>		<u>\$24,500.00</u>
1915		1915	
Jan. 31	Interest on Note \$100.00	Jan. 31	Gain on Real
	A's Capital, 50% 300.00		Estate..... \$700.00
	B's Capital, 50% 300.00		
	<u>\$700.00</u>		<u>\$700.00</u>

Having obtained the foregoing, the solution of the problem is as follows:

SOLUTION No. 1

BALANCE SHEET AT NOVEMBER 30, 1914

Cash	\$14,200.00	B's Capital (as per account below).....	\$12,050.00
Real Estate.....	3,300.00	Promissory Note:	
A's Capital (overdrawing as per account below).....	4,750.00	Principal.....	10,000.00
		Interest Accrued.....	200.00
	<u>\$22,250.00</u>		<u>\$22,250.00</u>

A—CAPITAL ACCOUNT

Jan. 1, 1912		1912	
to		Jan. 1 Cash.....	\$24,000.00
Nov. 30, 1914 Drawings..	\$25,800.00	1914	
	<u>\$25,800.00</u>	Nov. 30 Balance*.....	1,800.00
			<u>\$25,800.00</u>
1914		1914	
Nov. 30 Balance*.....	\$1,800.00	Nov. 30 Balance, as per	
Profit and Loss,		balance sheet..	\$4,750.00
50%.....	2,950.00		
	<u>\$4,750.00</u>		<u>\$4,750.00</u>
1914		1915	
Nov. 30 Balance (after		Jan. 31 Profit and Loss	\$300.00
closing).....	\$4,750.00	Jan. 31 Cash	4,450.00
	<u>\$4,750.00</u>		<u>\$4,750.00</u>

*Balance excludes charge of \$4,500 included in balance given by the problem.

B—CAPITAL ACCOUNT

1914		1912	
Nov. 30 Balance*.....	<u>\$15,000.00</u>	Jan. 1 Cash.....	<u>\$15,000.00</u>
1914		1914	
Nov. 30 Profit and Loss,		Nov. 30 Balance*.....	<u>\$15,000.00</u>
50%.....	\$2,950.00		
Balance, as per			
balance sheet			
above.....	12,050.00		
	<u>\$15,000.00</u>		<u>\$15,000.00</u>
1915		1914	
Jan. 31 Cash.....	<u>\$12,350.00</u>	Nov. 30 Balance, as per	
		balance sheet	
		above	\$12,050.00
		1915	
		Jan. 31 Profit and Loss,	
		50%.....	300.00
	<u>\$12,350.00</u>		<u>\$12,350.00</u>

*Balance excludes charge of \$4,500 included in balance given by the problem.

SOLUTION No. 2

The following solution approaches the subject from a different point. It assumes that the debit balance of A represents the debit of his drawing account, while the credit balance of B represents a loan to the copartnership.

The first figures to be put together are those agreed upon by the partners. These are, November 30, 1914, as follows:

Cash	\$14,200.00	
A—net debit—Drawings.....	6,300.00	
Expenses	15,300.00	
B—net credit—Loan to Copartnership.....		\$10,500.00
Profit and Loss—debit and credit.....	9,000.00	1,500.00
Real Estate.....	3,300.00	

Bank Loan.....		10,000.00
Accrued Interest thereon—expense and liability..	200.00	200.00
	<u>\$48,300.00</u>	<u>\$22,200.00</u>

There remains therefore \$26,100 of their original capital of \$39,000. Dividing this loss of \$12,900 equally, we get the following result:

A, \$24,000 less \$6,450.....	17,550.00
B, \$15,000 less \$6,450.....	8,550.00
	<u>\$48,300.00</u>
	<u>\$48,300.00</u>

Thus the November 30 trial balance is completed. The next step is to prepare the partners' accounts as of November 30, 1914, and the balance sheet as of the same date.

A—CAPITAL ACCOUNT

1914	1914
Nov. 30 Transferred from Current Account..... \$6,300.00	Nov. 30 Balance.....\$17,550.00
Losses, $\frac{1}{2}$ 11,500.00	Balance carried down..... 250.00
<u>\$17,800.00</u>	<u>\$17,800.00</u>
1914	
Nov. 30 Overdrawn..... \$250.00	

B—CAPITAL ACCOUNT

1914	1914
Nov. 30 Loss, $\frac{1}{2}$.....\$11,500.00	Nov. 30 Balance..... \$8,550.00
	Balance carried down..... 2,950.00
<u>\$11,500.00</u>	<u>\$11,500.00</u>
1914	
Nov. 30 Overdrawn..... \$2,950.00	

B—LOAN ACCOUNT

	1914
Nov. 30 Balance.....	\$10,500.00

A—CURRENT ACCOUNT

1914	1914
Nov. 30 Balance..... \$6,300.00	Nov. 30 Transferred to Capital..... \$6,300.00

A & B**BALANCE SHEET AT NOVEMBER 30, 1914***Assets*

Cash	\$14,200.00
Real Estate.....	3,300.00
A's Capital Overdrawn.....	250.00
	<u>\$17,750.00</u>

Liabilities

Bank Loan.....	\$10,000.00
Interest thereon.....	200.00
	<u>\$10,200.00</u>
B—Loan Account.....	\$10,500.00
Less B's Capital Overdrawn.....	2,950.00
	<u>7,550.00</u>
	<u>\$17,750.00</u>

PARTNERS' ACCOUNTS AS OF CLOSE OF LIQUIDATION**A—CAPITAL ACCOUNT**

1914	Profit on Real Es-
Dec. Above Balance..... \$250.00	tate, 1/2..... \$350.00
Interest on Note, 1/2 50.00	
Cash..... 50.00	
	<u>\$350.00</u>
<u>\$350.00</u>	<u>\$350.00</u>

B—CAPITAL ACCOUNT

1914		Profit on Real Es-	
Dec. Above Balance.....	\$2,950.00	tate, ½.....	\$350.00
Interest on Note, ½	50.00	Cash to make up de-	
		ficiency in Capital	2,650.00
	<u>\$3,000.00</u>		<u>\$3,000.00</u>

B—LOAN ACCOUNT

Cash to settle this	1914
Loan.....	Dec. Above Balance....
\$10,500.00	\$10,500.00

For reference the cash account is given :

CASH

1914		1915	
Nov. Balance	\$14,200.00	Jan. Loan Paid and	
Real Estate Sold	4,000.00	Interest.....	\$10,300.00
B's Capital Over-		B—Loan	10,500.00
drawn.....	2,650.00	A—Capital	50.00
	<u>\$20,850.00</u>		<u>\$20,850.00</u>

Comments on Solution No. 2

Applying to this solution the test applied to the first, we obtain :

Resources of the Business:

Contributed by Partner A.....	\$24,000.00
" " B.....	15,000.00
Borrowed on Note.....	10,000.00
Loaned by B.....	10,500.00
	<u>\$59,500.00</u>

Applications:

Purchase of Real Estate:		
Market Value.....	\$3,300.00	
Less Gain.....	1,500.00	\$1,800.00
Payment of Expenses.....		15,300.00
Drawn by A.....		6,300.00
Losses:		
Charged to A & B.....	\$12,900.00	
Not Distributed.....	9,000.00	21,900.00
Total Applications.....	\$45,300.00	
Cash Balance.....	14,200.00	\$59,500.00

As will be seen from the above, the solution is perfectly logical if the assumption is true. Who can tell?

Question II

On June 30, 1913, X and Y, partners, operating a manufacturing plant, incorporated under the laws of the State of New York as the X and Y Manufacturing Company with an authorized capital of \$500,000. The corporation purchased all of the assets and assumed all of the liabilities of the partnership as set forth in a balance sheet dated June 30, 1913, giving as consideration its entire issue of capital stock, which stock was all taken by X and Y.

BALANCE SHEET, JUNE 30, 1913

Assets

Plant and Machinery.....	\$175,000.00
Material on Hand, per inventory.....	102,625.00
Accounts Receivable.....	113,750.00
Notes Receivable.....	7,500.00
Cash	32,125.00
Total.....	\$431,000.00

Liabilities

X—Capital.....	\$240,000.00
Y—Capital.....	160,000.00
Accounts Payable.....	26,250.00
Notes Payable.....	3,500.00
Wages Due and Unpaid.....	1,250.00
Total.....	<u>\$431,000.00</u>

The change in organization was not reflected on the books at the time of incorporation, but at the close of the first fiscal year (June 30, 1914) of the corporation's existence the condition of the books was shown by the following trial balance:

TRIAL BALANCE, JUNE 30, 1914

X—Capital.....		\$240,000.00
Y—Capital.....		160,000.00
Plant and Machinery.....	\$187,500.00	
Material, per inventory, June 30, 1913.....	102,625.00	
Sales.....		657,025.00
Purchases.....	240,000.00	
Labor.....	172,500.00	
Office Salaries.....	35,000.00	
Traveling Expenses.....	12,000.00	
Interest.....	3,000.00	
Stationery and Printing.....	875.00	
Rent and Taxes.....	21,000.00	
Discount and Allowances.....	11,250.00	
Fuel.....	23,000.00	
Insurance.....	875.00	
Freight Inward.....	8,750.00	
Commission.....	31,875.00	
Advertising.....	2,500.00	
Notes Receivable.....	30,575.00	
Notes Payable.....		5,500.00
Accounts Receivable.....	180,575.00	
Accounts Payable.....		39,250.00
Cash.....	37,875.00	
	<u>\$1,101,775.00</u>	<u>\$1,101,775.00</u>

Depreciation on plant and machinery, 5% ; unexpired insurance, \$375 ; bad debts, \$1,625 ; inventory of material on hand, June 30, 1914, \$98,025.

Make such entries as would convert the partnership books into those of the corporation, and prepare a statement of income and profit and loss for the year July 1, 1913, to June 30, 1914, and a balance sheet as of June 30, 1914. (New York, January, 1915.)

Answer to Question II

THE X AND Y MANUFACTURING COMPANY

JOURNAL ENTRIES

Good-Will	\$100,000.00	
To X—Capital Account.....		\$50,000.00
" Y— " "		50,000.00
To raise value of good-will sold by the co-partnership to the corporation, and to distribute its value to the partners entitled thereto, upon the assumption that the partners share equally.		
X—Capital Account.....	290,000.00	
Y— " "	210,000.00	
To Capital Stock.....		500,000.00
For issue of stock to vendor partners, on the basis of their capital accounts, in payment of the sale by them to the corporation, of the following assets, subject to the following liabilities:		
Assets:		
Plant and Machinery.....	\$175,000.00	
Material Inventory.....	102,625.00	
Accounts Receivable.....	113,750.00	
Notes Receivable.....	7,500.00	
Cash	32,125.00	
Good-Will	100,000.00	
	\$531,000.00	

Liabilities:

Accounts Payable..... \$26,250.00

Notes Payable..... 3,500.00

Wages Due..... 1,250.00

\$31,000.00Net Assets..... \$500,000.00

GENERAL BALANCE SHEET AT JUNE 30, 1914

Capital Assets:

Plant and Machinery \$187,500.00

Good-Will 100,000.00

Working and Trading

Assets:

Inventory of Material 98,025.00

Current Assets:

Cash 37,875.00

Notes Receivable.... 30,575.00

Accounts Receivable. 180,575.00

Deferred Debit Items:

Insurance Premiums

Unexpired 375.00

\$634,925.00

Capital Liabilities:

Capital Stock.....\$500,000.00

Current Liabilities:

Notes Payable..... 5,500.00

Accounts Payable.... 39,250.00

Surplus:

Appropriated:

For Depreciation of

Plant and Ma-
chinery 9,375.00

For Accounts Re-

ceivable, subject
to loss..... 1,625.00

Available for Divi-

dends 79,175.00

\$634,925.00

STATEMENT OF INCOME AND PROFIT & LOSS

Income from Sales:

Sales \$657,025.00

Less Discounts and Allow-

ances 11,250.00*

Net Income from Sales..... \$645,775.00

Cost of Goods Sold:

Manufacturing Cost:

Purchases \$240,000.00

*Treated as deductions from sales because the amount contains allowances; if only cash discounts were involved, they would be treated as deductions from income.

PARTNERSHIP ACCOUNTS

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Decrease of Inventory of Materials	4,600.00	
Total	\$244,600.00	
Labor	172,500.00	
Fuel	23,000.00	
Depreciation of Plant and Machinery	9,375.00	
Total Manufacturing Cost of Goods Sold.....	\$449,475.00	
Additional Cost: Freight Inward.....	8,750.00	
Total Cost of Goods Sold.....	458,225.00	
Gross Profit on Sales.....		\$187,550.00
Selling Expenses:		
Commissions	\$31,875.00	
Advertising	2,500.00	
Traveling Expenses (of salesmen).....	12,000.00	
Total Selling Expense.....		46,375.00
Selling Profit.....		\$141,175.00
Administration Expense:		
Office Salaries.....	\$35,000.00	
Stationery and Printing.....	875.00	
Total Administration Expense.....		35,875.00
Income from Operations.....		\$105,300.00
Deductions from Income:		
Interest	\$3,000.00	
Fire Insurance Premiums Expended.....	500.00	
Rents and Taxes.....	21,000.00	
Total Deductions from Income.....		24,500.00
Net Income from All Sources.....		\$80,800.00
Reserve for Bad Accounts Receivable.....		1,625.00
Profit and Loss Surplus for the Period.....		<u>\$79,175.00</u>

Question III

Arnold & Jenkins, operating separately, decide to enter into partnership on July 1, 1915. Their respective balance sheets as of that date were as follows:

ARNOLD

Assets

Furniture and Fixtures.....	\$2,250.00
Accounts Receivable.....	7,500.00
Merchandise	7,650.00
Cash	600.00
	\$18,000.00

Liabilities

Accounts Payable.....	\$3,000.00
Capital Account.....	15,000.00
	\$18,000.00

JENKINS

Assets

Furniture and Fixtures..	\$1,800.00
Accounts Receivable.....	4,500.00
Merchandise	6,000.00
Cash	1,200.00
	\$13,500.00

Liabilities

Accounts Payable.....	\$4,500.00
Capital Account.....	9,000.00
	\$13,500.00

It was agreed that Arnold & Jenkins should put in their accounts receivable at 10% less than face value, these

amounts to be charged against their capital accounts and carried on the partnership books as a reserve for bad debts. Of Jenkins' furniture only \$750 was to be taken over by the partnership. With the above exceptions, the assets and liabilities of the parties were to be taken over by the partnership at above figures, except that Jenkins was to invest in the partnership, in cash, an amount which, after making the adjustments above referred to, would make his capital account the same as that of Arnold.

You are asked to draw off a balance sheet of Arnold & Jenkins' partnership July 1, 1915, showing effect of above provisions. (Arkansas, 1915.)

Answer to Question III

ARNOLD & JENKINS

JOURNAL ENTRIES

Furniture and Fixtures.....	\$2,250.00	
Accounts Receivable.....	7,500.00	
Merchandise	7,650.00	
Cash	600.00	
To Accounts Payable.....		\$3,000.00
" Reserve for Bad Debts.....		750.00
" Arnold, Capital.....		14,250.00
The business of Arnold taken over by the firm of Arnold & Jenkins in accordance with the terms of the partnership agreement.		

Furniture and Fixtures.....	750.00	
Accounts Receivable.....	4,500.00	
Merchandise	6,000.00	
Cash	1,200.00	
To Accounts Payable.....		4,500.00
" Reserve for Bad Debts.....		450.00
" Jenkins, Capital.....		7,500.00
The business of Jenkins taken over by the firm of Arnold & Jenkins in accordance with the terms of the partnership agreement.		

Cash	6,750.00	
To Jenkins, Capital.....		6,750.00
Investment of cash by Jenkins in order to make his capital investment equal to that of Arnold, as required by the partnership agreement.		

ARNOLD & JENKINS

BALANCE SHEET, JULY 1, 1915

<i>Assets</i>		<i>Liabilities and Capital</i>	
Furniture and Fixtures..	\$3,000.00	Accounts Payable.....	\$7,500.00
Merchandise	13,650.00	Capital:	
Cash	8,550.00	Restricted:	
Accounts Receivable....	12,000.00	Reserve for	
		Bad Debts...	\$1,200
		Unrestricted:	
		Arnold	\$14,250
		Jenkins	14,250
		Total Unre-	
		stricted	\$28,500
		Total Capital.....	29,700.00
Total Assets.....	<u>\$37,200.00</u>	Total Liabilities and	
		Capital	<u>\$37,200.00</u>

Question IV

A and B buy merchandise to the amount of \$4,000, A contributing \$2,500 and B \$1,500. They sell to C a $\frac{1}{3}$ interest in the business for \$2,000.

How much of the \$2,000 will A and B receive respectively in order to make A, B, and C equally interested.

Draft entries to show solution of same. (South Carolina, 1915.)

Answer**First Method**

Assuming the sale to be of an interest in merchandise, it would not be possible to assume any different value than cost, and the sale of any interest in such merchandise must be divided on the same basis, as A and B had interests therein. As regards the profit on such sale, in the absence of any agreement it is assumed to be divided equally.

The entries would be as follows:

Cash	\$2,000.00	
To C.....		\$1,333.33
" Profit and Loss.....		666.67
Profit and Loss.....	666.67	
To A.....		333.34
" B.....		333.33
A (\$333.34 + \$1,166.66).....	1,500.00	
B (\$333.33 + \$166.67).....	500.00	
To Cash.....		2,000.00

The last entry would show the disposition of the \$2,000 cash, partly as a distribution of profits and partly as a withdrawal of capital to make the original partners' investments equal to that of C. A and B reduce their respective investments by the amount of the excess each has over \$1,333.33.

Second Method

If the deal with C were not a partnership transaction, but merely the purchase from A and B as individuals, of such part of their investment as would give C—and also each of the others—a one-third interest in the new partnership business, then C's payment of \$2,000 would not appear on the partnership books.

C would pay A for $7/24$ of the whole.....	\$1,750
C would pay B for $1/24$ of the whole.....	250
	\$2,000

The entries upon the firm books to give each one-third would be as follows:

A	\$1,166.66	
B	166.67	
To C.....		\$1,333.33

A's account and B's account would each show the same credit of \$1,333.33.

Third Method

Assuming a partnership relation between A and B, and further assuming that C would not pay \$2,000 for a third interest in such partnership unless, theoretically, the business was worth \$6,000, it would be proper to set up a good-will value for this transaction. Without relation to profits, it must be assumed that the capital assets of any business must be shared in the same proportion by the partners as their individual investments bear to the total. It is probable, also, that C would insist on being credited for the full amount of his investment. Therefore, in spite of the fact that a Good-Will account does not appear reasonable in a new business, the following solution seems the most logical:

Good-Will	\$2,000.00	
To A ($\frac{1}{3}$).....		\$1,250.00
" B ($\frac{1}{3}$).....		750.00
Cash	2,000.00	
To C.....		2,000.00
A (Withdrawal).....	1,750.00	
B (Withdrawal).....	250.00	
To Cash.....		2,000.00

In the last entry, as in the solution headed First Method, A and B draw out their respective shares of the \$2,000, at the same time adjusting their capital accounts to equal one-third shares. This adjustment, in effect, involves the payment of \$500 to A by B, thereby changing the original investments from \$2,500 and \$1,500, to \$2,000 each.

Question V

A enters into an agreement with B on January 1, 1915, by which the latter is to invest \$50,000 for the former, the arrangement being that A is to get 5% on the investment, after which A and B share the profits and losses equally.

B receives \$10,000 from A on January 8, 1915, \$5,000 on February 1, 1915, \$10,000 on February 10, 1915, \$20,000 on February 18, 1915, and \$5,000 on March 1, 1915. B invests in five \$1,000 bonds at 98½ on January 10, 1915 through a broker, and five \$1,000 bonds at 97 on January 12, 1915, paying cash for the same. On February 1, 1915, he purchases \$10,000 worth of bonds at 99 on a margin from the same broker, being obliged to put up 60% in cash.

The interest on all these bonds is payable semiannually on March 1 and September 1, the interest rate being 5% per annum. He gave A a check on April 8 for \$500 as he sold the lot of bonds purchased on January 10 at a profit of \$600 on the first mentioned date, including the broker's commission both in buying and selling this lot of bonds.

Show the various accounts as they stand on the ledger, including all the entries together with the cash book entries and any other you think may be necessary to give a clear interpretation of the situation on May 1, 1915. Also where should these various securities be at the time the statement is rendered, namely, May 1, 1915? (Delaware, 1915.)

Answer to Question V

JOURNAL ENTRIES

February 1, 1915

Securities Owned (Pledged).....	\$9,900.00	
To X, Broker.....		\$9,900.00
For the purchase of ten bonds at 99 to be pledged against a loan of 40% by broker. In- terest at 5%, March and September.		

May 1

Accrued Interest on Securities Owned.....	125.00	
To Interest on Securities Owned.....		125.00
Accrued interest to date on fifteen bonds owned.		
—		
Profit and Loss.....	563.84	
To A, Drawing Account.....		563.84
5% to date on the various amounts received from A.		
—		
Interest on Securities Owned.....	240.48	
To Commission Paid.....		18.75
" Profit and Loss.....		221.73
To close.		
—		
Profit and Loss.....	257.89	
To A, Drawing Account.....		128.95
" B, Drawing Account.....		128.94

CASH BOOK

Debits

1915		
Jan. 8 A, Principal	On account of \$50,000.....	\$10,000.00
Feb. 1 " "	" " " "	5,000.00
Feb. 10 " "	" " " "	10,000.00
Feb. 18 " "	" " " "	20,000.00
Mar. 1 " "	" " " "	5,000.00
1 Accrued Interest on Se-	Coupons due this date.	
curities Owned		389.80
1 Interest on Securities		
Owned		110.20

PARTNERSHIP ACCOUNTS

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Apr. 8 Securities Owned	For the sale of five bonds purchased Jan. 10 at a profit of \$600 including commissions to buy and sell. 4,925.00 5.28 600.00 6.25	
8 Interest on Securities Owned		
8 Profit and Loss		
8 Commissions Paid		
May 1 Total Receipts to date.....		\$56,036.53
May 1 Balance		\$39,406.73

Credits

1915		
Jan. 10 Securities Owned	For the purchase of five bonds at 98½ and accrued interest. Interest at 5% March and September. \$4,925.00 90.07 6.25	
10 Accrued Interest on Securities Owned		
10 Commissions Paid		
12 Securities Owned	For the purchase of five bonds at 97 and accrued interest. Interest at 5% March and September. 4,850.00 91.40 6.25	
12 Accrued Interest on Securities Owned		
12 Commissions Paid		
Feb. 1 X, Broker	60% margin on ten bonds 5% Interest March and September. Purchased this day. 5,940.00 208.33 12.50	
1 Accrued Interest on Securities Owned		
1 Commissions Paid		
Apr. 8 A, Drawing Account	On account	500.00
May 1 Total Disbursements to date.....		16,629.80
Balance		39,406.73
		\$56,036.53

LEDGER ACCOUNTS

SECURITIES OWNED

1915		1915	
Jan. 10 5 bonds at 98½....C. B.	\$4,925.00	Apr. 8 Sale of 5 bonds...C. B.	\$4,925.00
12 5 bonds at 97.....	4,850.00	May 1 Balance.....	4,850.00
	<u>\$9,775.00</u>		<u>\$9,775.00</u>
1915			
May 1 Balance.....	\$4,850.00		

SECURITIES OWNED (PLEDGED)

1915	
Feb. 1	10 bonds at 99..J. \$9,900.00

ACCRUED INTEREST ON SECURITIES OWNED

1915	
Jan. 10.....	C. B. \$90.07
Jan. 12.....	C. B. 91.40
Feb. 1.....	C. B. 208.33
May 1.....	J. 125.00
	<u>\$514.80</u>
May 1 Balance.....	\$125.00

1915	
Mar. 1	Cash.....C. B. \$389.80
May 1	Balance..... 125.00
	<u>\$514.80</u>

INTEREST ON SECURITIES OWNED

1915	
May 1	J. \$240.48
	<u>\$240.48</u>

1915	
Mar. 1	Cash.....C. B. \$110.20
Apr. 8	Cash.....C. B. 5.28
May 1	J. 125.00
	<u>\$240.48</u>

CASH

1915	
May 1	Receipts..C. B. \$56,036.53
	<u>\$56,036.53</u>
1915	
May 1	Balance..... \$39,406.73

1915	
May 1	Disburse-ments...C. B. \$16,629.80
	Balance..... 39,406.73
	<u>\$56,036.53</u>

A, DRAWING ACCOUNT

1915			1915		
Apr. 8	Cash.....	\$500.00	May 1	Interest.....J.	\$563.84
May 1	Balance.....	192.79	1	Profit and Loss..J.	128.95
		<u>\$692.79</u>			<u>\$692.79</u>
			May 1	Balance.....	\$192.79

B, DRAWING ACCOUNT

1915	
May 1	Profit and Loss..J. \$128.94

X, BROKER

1915			1915		
Feb. 1	Cash.....C. B.	\$5,940.00	Feb. 1	J.	\$9,900.00
May 1	Balance.....	3,960.00			<u>\$9,900.00</u>
		<u>\$9,900.00</u>			<u>\$9,900.00</u>
			Balance.....		\$3,960.00

COMMISSION PAID

1915			1915		
Jan. 10	C. B.	\$6.25	Apr. 8	C. B.	\$6.25
12	"	6.25	May 1	J.	18.75
Feb. 1	"	12.50			<u>\$25.00</u>
		<u>\$25.00</u>			<u>\$25.00</u>

A, PRINCIPAL

1915	1915
May 1 Balance..... \$50,000.00	Jan. 8 Cash..... C. B. \$10,000.00
	Feb. 1 " " 5,000.00
	Feb. 10 " " 10,000.00
	Feb. 18 " " 20,000.00
	Mar. 1 " " 5,000.00
<u>\$50,000.00</u>	<u>\$50,000.00</u>
	Balance..... \$50,000.00

PROFIT AND LOSS

1915	1915
May 1 A, Drawing Ac- count J. \$563.84	Apr. 8 Cash..... C. B. \$600.00
1 J. 257.89	May 1 J. 221.73
<u>\$821.73</u>	<u>\$821.73</u>

Question VI

By partnership agreement existing between Brown and Gray, Brown has $\frac{2}{3}$ of the profits and Gray $\frac{1}{3}$. Brown's capital account stands credited \$50,000. Gray's capital account stands credited \$40,000. The assets of the partnership consist of the following:

Factory and Machinery.....	\$75,000.00
Stock as per Inventories.....	30,000.00
Accounts Receivable.....	15,500.00

The liabilities are as follows:

Accounts Payable.....	\$15,000.00
Notes Payable.....	10,000.00
Overdraft Bank.....	5,500.00

Gray takes over the liabilities as above mentioned, and the assets at the following agreed valuation:

Factory and Machinery.....	\$70,000.00
Stock as per Inventories.....	26,000.00
Accounts Receivable.....	14,000.00

An arrangement is made whereby Gray received \$500 from Brown for accepting sole liability for discounted bills receivable.

Make up a statement showing the amount that Brown should receive, it being understood that losses on capital are borne by the partners in the proportion in which the profits are divided. (South Carolina, 1915.)

Answer to Question VI

BROWN

Loss of Capital ($\frac{3}{4}$)..	\$7,000.00	Capital.....	\$50,000.00
Gray—Allowance on account of Bills Discounted.....	500.00		
Balance—to be paid...	42,500.00		
	<u>\$50,000.00</u>		<u>\$50,000.00</u>
		Balance.....	\$42,500.00

GRAY

Loss on Capital ($\frac{1}{4}$)..	\$3,500.00	Capital.....	\$40,000.00
Balance.....	37,000.00	Brown—Allowance on Account of Bills Discounted.....	500.00
	<u>\$40,500.00</u>		<u>\$40,500.00</u>
		Balance	\$37,000.00

After entries as above in settlement of losses and specific adjustment between partners, Brown should receive the amount of cash as shown by the balance of his account.

The statement required would be as follows:

STATEMENT SHOWING AMOUNT DUE BROWN

ON SALE OF SHARE OF BUSINESS TO GRAY

Capital Investment.....	\$50,000.00
Less Losses in Revaluing Assets:	
Factory and Machinery.....	\$5,000.00
Stock as per Inventories.....	4,000.00
Accounts Receivable.....	1,500.00
	<u>\$10,500.00</u>
Divided as Profits Are Shared:	
Brown $\frac{2}{3}$	7,000.00
Gray $\frac{1}{3}$	<u>\$3,500.00</u>
Capital—After Revaluing Assets.....	\$43,000.00
Less specific allowance to Gray for assuming sole liability for Notes Receivable Discounted.....	500.00
Balance—due Brown from Gray.....	<u><u>\$42,500.00</u></u>

Question VII

Smith and Roberts are partners trading under the name of Smith, Roberts & Company. The following is a trial balance of the partnership books:

Cash	\$12,300.00	
Notes Receivable.....	32,700.00	
Accounts Receivable.....	47,000.00	
Merchandise Inventory.....	3,650.00	
Furniture and Fixtures.....	3,000.00	
Buildings	13,000.00	
Real Estate.....	50,000.00	
Notes Payable.....		\$30,000.00
Accounts Payable.....		13,100.00
Purchases	84,000.00	

PARTNERSHIP ACCOUNTS

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Sales		152,000.00
Advertising	2,600.00	
Commissions	3,050.00	
General Expense.....	12,900.00	
Office Salaries.....	9,300.00	
Insurance (1 year).....	625.00	
Cash Discount.....	375.00	
Interest	175.00	
Discount and Allowances.....		550.00
Exchange	25.00	
Postage	1,650.00	
J. Smith, Drawing Account.....	2,400.00	
F. Roberts, Drawing Account.....	1,900.00	
J. Smith, Capital Account.....		50,000.00
F. Roberts, Capital Account.....		35,000.00
	<u>\$280,650.00</u>	<u>\$280,650.00</u>

Notations:

Inventory on hand, \$5,365.

Unexpired insurance, 4 months.

Unused advertising materials, \$165.

Office salaries due, \$240.

Division of profits: Smith, $\frac{5}{8}$ ths, Roberts, $\frac{3}{8}$ ths.

Prepare balance sheet and profit and loss account.

(Ohio and Nebraska, 1915.)

Answer to Question VII

SMITH, ROBERTS & COMPANY

PROFIT AND LOSS ACCOUNT

TRADING SECTION

Inventory at beginning. \$3,650.00	Sales .....\$152,000.00
Purchases 84,000.00	Discounts and Allow-
Advertising 2,435.00	ances 550.00
Commissions 3,050.00	Inventory at close..... 5,365.00
Balance carried down,	
being Gross Profit... 64,780.00	
<u>\$157,915.00</u>	<u>\$157,915.00</u>

PROFIT AND LOSS SECTION

General Expense.....	\$12,900.00	Balance brought down,	
Office Salaries.....	9,540.00	being Gross Profit...	\$64,780.00
Insurance	416.67		
Cash Discounts.....	375.00		
Interest	175.00		
Exchange	25.00		
Postage	1,650.00		
Balance carried to Partners' Accounts, being			
Net Profit.....	39,698.33		
	<u>\$64,780.00</u>		<u>\$64,780.00</u>

SCHEDULE SHOWING ADJUSTMENT OF PARTNERS' ACCOUNTS

	Total	J. Smith	F. Roberts
Capital at beginning of period.....	\$85,000.00	\$50,000.00	\$35,000.00
Net Profits for the period.....	39,698.33	24,811.46	14,886.87
	<u>\$124,698.33</u>	<u>\$74,811.46</u>	<u>\$49,886.87</u>
Deduct Drawings.....	4,300.00	2,400.00	1,900.00
Capital at end of period—as per			
Balance Sheet.....	<u>\$120,398.33</u>	<u>\$72,411.46</u>	<u>\$47,986.87</u>

JOURNAL ENTRIES

Merchandise Inventory.....	\$5,365.00	
To Merchandise Inventory (Old).....		\$5,365.00
Insurance Unexpired.....	208.33	
To Insurance.....		208.33
Advertising Materials.....	165.00	
To Advertising.....		165.00
Office Salaries.....	240.00	
To Salaries Accrued.....		240.00
J. Smith, Capital Account.....	2,400.00	
F. Roberts, Capital Account.....	1,900.00	
To J. Smith, Drawing Account.....		2,400.00
" F. Roberts, Drawing Account.....		1,900.00
Profit and Loss.....	39,698.33	
To J. Smith, Capital Account.....		24,811.46
" F. Roberts, Capital Account.....		14,886.87

PARTNERSHIP ACCOUNTS

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SMITH, ROBERTS & COMPANY BALANCE SHEET

<i>Assets</i>		<i>Liabilities and Capital</i>	
Fixed Assets:		Current Liabilities:	
Real Estate.....	\$50,000.00	Salaries Accrued.....	\$240.00
Buildings	13,000.00	Notes Payable.....	30,000.00
Furniture and Fixtures.....	3,000.00	Accounts Payable.....	13,100.00
Total Fixed Assets.....	\$66,000.00	Total Current Liabilities.....	\$43,340.00
Working and Trading Assets:		Capital:	
Merchandise Inventory.....	5,365.00	J. Smith.....	\$72,411.46
		F. Roberts.....	47,986.87
Current Assets:			
Cash	\$12,300.00	Total Capital.....	120,398.33
Notes Receivable.....	32,700.00		
Accounts Receivable.....	47,000.00		
Total Current Assets.....	92,000.00		
Deferred Charges to Expense:			
Insurance Unexpired.....	\$208.33		
Advertising Materials.....	165.00		
Total Deferred Charges to Expense.....	373.33		
Total Assets.....	\$163,738.33	Total Liabilities and Capital.....	\$163,738.33

Question VIII

A partnership is dissolved as at January 1, both partners being in debt to the firm. Subsequently, the assets are sold at less than the book value and the liabilities are partly liquidated. The partners pay their indebtedness as of January 1. How must the liquidating loss be adjusted as between the partners? Why? (New York, January, 1915.)

Answer

When the partners agree on January 1 to dissolve, and at that time fix the value of their assets and their liabilities, they thereby fix the exact amount of their individual capital accounts. In addition, having paid what they owe to the firm, they show their intention to re-establish the true capital. Having done this, from that time on, losses in liquidation are losses of capital and must be divided pro rata according to capital investment. This is not a question of profit and loss on business operations.

Question IX

The capital of a partnership is contributed as follows:

- A, \$90,000
- B, 45,000
- C, 15,000

The partnership agreement provides for profit-sharing as follows:

- A, 50%
- B, 30%
- C, 20%

The partners' salaries are as follows:

A, \$5,000

B, 3,000

C, 2,000

At the end of the first year's business, C dies. The books are closed and the net assets of the business are shown to be \$152,500. A and B liquidate the affairs of the partnership and distribute the surplus assets as follows:

1st distribution.....	\$42,410.20
2nd distribution.....	74,622.30
Final distribution.....	31,967.50

Prepare a statement of the partners' accounts, showing how the distribution of assets should be made and the apportionment of the loss. (Maryland, February, 1915.)

Answer to Question IX

A

Loss on Operation		Investment	\$90,000.00
(50%)	\$3,750.00	Salary	5,000.00
Loss on Liquidation			
(60%)	2,100.00		
First Distribution.....	25,196.12		
Second "	44,773.38		
Final "	19,180.50		
	<u>\$95,000.00</u>		<u>\$95,000.00</u>

B

Loss on Operation		Investment	\$45,000.00
(30%)	\$2,250.00	Salary	3,000.00
Loss on Liquidation			
(30%)	1,050.00		
First Distribution.....	12,723.06		
Second "	22,386.69		
Final "	9,590.25		
	<u>\$48,000.00</u>		<u>\$48,000.00</u>

C

Loss on Operation		Investment.....	\$15,000.00
(20%).....	\$1,500.00	Salary.....	2,000.00
Loss on Liquidation			
(10%).....	350.00		
First Distribution....	4,491.02		
Second "	7,462.23		
Final "	3,196.75		
	<u>\$17,000.00</u>		<u>\$17,000.00</u>

EXPLANATION

Apportionment of Cash

First Distribution.....	\$42,410.20
Second "	74,622.30
Final "	31,967.50
	<u>\$149,000.00</u>
Deduct Salaries.....	10,000.00
	<u>\$139,000.00</u>
A, 60%	\$83,400.00
B, 30%	41,700.00
C, 10%	13,900.00
	<u>\$139,000.00</u>

ADJUSTMENT—MADE ON FIRST PAYMENT

	A	B	C
Shares as per account.....	\$89,150.00	\$44,700.00	\$15,150.00
Salaries in first payment.....	5,000.00	3,000.00	2,000.00
	<u>\$84,150.00</u>	<u>\$41,700.00</u>	<u>\$13,150.00</u>
Cash as apportioned.....	83,400.00	41,700.00	13,900.00
	<u>\$750.00</u>	<u>.....</u>	<u>—\$750.00</u>

C pays A \$750 to put accounts on 60, 30, and 10% basis.

DETERMINATION OF SHARES

	Total	A	B	C
Capital Investment.....	\$150,000.00	\$90,000.00	\$45,000.00	\$15,000.00
Add Salaries.....	10,000.00	5,000.00	3,000.00	2,000.00
Total Credits.....	<u>\$160,000.00</u>	<u>\$95,000.00</u>	<u>\$48,000.00</u>	<u>\$17,000.00</u>
Deduct Loss on Business..	7,500.00	3,750.00	2,250.00	1,500.00
Net Worth.....	<u>\$152,500.00</u>	<u>\$91,250.00</u>	<u>\$45,750.00</u>	<u>\$15,500.00</u>
Deduct Liquidation Loss..	3,500.00	2,100.00	1,050.00	350.00
Surplus Assets—Shares...	<u><u>\$149,000.00</u></u>	<u><u>\$89,150.00</u></u>	<u><u>\$44,700.00</u></u>	<u><u>\$15,150.00</u></u>

DISTRIBUTION OF SHARES

	Total	A	B	C
First Distribution.....	\$42,410.20			
Deduct Salaries.....	10,000.00	\$5,000.00	\$3,000.00	\$2,000.00
Apportioned (60-30-10)...	32,410.20	19,446.12	9,723.06	3,241.02
Adjustment.....		750.00		<u>—750.00</u>
First Distribution.....	<u>\$42,410.20</u>	<u>\$25,196.12</u>	<u>\$12,723.06</u>	<u>\$4,491.02</u>
Second "	74,622.30	44,773.38	22,386.69	7,462.23
Final "	31,967.50	19,180.50	9,590.25	3,196.75
Total Cash.....	<u><u>\$149,000.00</u></u>	<u><u>\$89,150.00</u></u>	<u><u>\$44,700.00</u></u>	<u><u>\$15,150.00</u></u>

RECEIPTS AND DISBURSEMENTS, STATEMENT OF

Question I

(a) Differentiate between a statement of income and expense, and a statement of receipts and disbursements.

(b) The annual report of a club contains both statements. You find that the items and figures in one are identical with those in the other. Account for the situation necessary for the existence of this similarity. (New York, June, 1915.)

Answer

(a) A statement of income and expenses refers to the income and expenses for a certain period of time, it being immaterial whether or not the items are actually received or disbursed in cash during the period.

A statement of receipts and disbursements is a statement showing the actual cash receipts and cash payments during a certain period. This statement usually does not disclose the profits for a period, since it may include items not affecting profits, such as contributions of capital and the sale or purchase of assets.

(b) The items and figures in both statements being identical, would indicate that there was no cash balance on hand at the beginning; that all the current income for the period was received in cash; that no cash other than current income was received during the period (neither in the nature of capital contribution nor payments on account of a previous period); that all expenses for the period were paid in cash, and that no expenses were prepaid or paid on account of a previous period.

RENT

Question I

The Jones Manufacturing Company, needing a larger building for its increasing business, finds a property desirable in every respect excepting that the building is much larger than is necessary. They lease the property at an annual rental of \$18,000, after considering that they can probably sublease part of the building. Owing to the desirability of the property and other favorable conditions, they execute a sublease for one-half of the building at an annual rental of \$18,000. How would you treat these facts in compiling the annual income statement of the Jones Manufacturing Company? (Wisconsin, 1915.)

Answer

Rent (Manufacturing Account—Administration and Selling).....	\$9,000.00	
Rent (Tenanted Property).....	9,000.00	
Accounts Payable (Cash).....		\$18,000.00
To apportion rent on fair basis, i.e., 50-50.		
Accounts Receivable (Cash).....	18,000.00	
Rental Revenue.....		18,000.00
To record amount received for space sublet.		

We now have a gross profit on rented property of \$9,000. There will be expenses chargeable against this gross profit for repairs, renewals, up-keep, insurance, and perhaps a proportion of taxes.

RESERVES AND RESERVE FUNDS

Question I

Name *six* types of "Reserves." (New York, January, 1915.)

Question II

In the accounts of a manufacturing corporation, what reserve accounts would you expect to find? Describe the purpose of each and suggest at least one basis for each upon which they can be created and maintained. (Pennsylvania, 1915.)

Answer to Questions I and II

1. Reserves for redemption of debt.
2. Reserves for possible losses of accounts receivable.
3. Reserves for injuries (transportation companies).
4. Reserves for obsolescence of physical units.
5. Reserves for depreciation of physical units.
6. Reserves for damage claims (transportation companies).

1. Redemption reserves should be set up periodically at an amount which, if placed at interest, will at the maturity of the debt amount to the face value of the obligation to be redeemed.

2. Accounts receivable reserves should be set up at a certain percentage of charge sales. Losses, as they occur, should be charged against the reserve set up, and the estimated percentage of sales reserved should be large enough to provide for such losses. The theory contemplates an amount reserved for bad debts which shall be set aside during the same period in which the debt originated.

3. Reserves for injuries should be based on an estimated percentage of revenue received, to be applied to injuries to

passengers, and a percentage of pay-roll outlay should be set aside for injuries to employees. Both these items are usually provided for by specific statutes in the different states.

4. Reserves for obsolescence are estimated on past experience, but are more or less arbitrary because of the rapidity of invention. They are usually set up on an estimated period of utility, and contemplate the reduction of the asset to scrap value during that time.

5. Reserves for depreciation are provided for by a charge to costs or expenses based on the life of the asset. If the asset is estimated to last ten years, depreciation is charged off at the rate of 10% per annum.

6. The purpose of a damage claim reserve is to provide for future losses through damage claims, out of current earnings derived from the source which may be responsible for the damage. Claims for freight losses would be provided for out of freight earnings. The reserve is set up by a debit to operating costs and a credit to the reserve.

Question III

(a) Give four examples of reserves. (b) State briefly two arguments, one pro and the other con, for setting up a secret reserve. (c) Should a shrinkage fund appear on the balance sheet as a debit or credit item? (d) Should a sinking fund retiring a bond issue be created out of profits, or not? Give one argument pro and the other con. (Oregon, 1915.)

Question IV

Mention four bona fide uses of a "Secret Reserve" and state your opinion as to the propriety or otherwise of the

creation of such reserve, giving reasons. (Minnesota, 1915.)

Answer to Questions III and IV

- (a) 1. Reserve for redemption of debt.
- 2. Reserve for possible losses on accounts receivable.
- 3. Reserve for depreciation of physical units.
- 4. Reserve for damage claims or contingencies.

(b) Secret reserves are not set up. It is a result of omission rather than of commission. The books should in all cases show the facts and that is the best reason against the existence of secret reserves, but the statement of an asset at less than its real value has often been defended because of the conservatism of such a course.

(c) A shrinkage fund should appear on the balance sheet as a credit item, on the asset or debit side of the statement, as a deduction from the specific asset the depreciation of which it records.

(d) A sinking fund for the retirement of a bond issue really should not be created out of profits, for in theory the purpose of the sinking fund is to provide for the repayment at maturity of the amount of capital brought into the business by means of the bond issue.

If the sinking fund is created out of profits, an injustice is worked against the present stockholders who are deprived of dividends in order that additional capital may be brought into the business for the benefit of the future stockholders.

In actual practice, the trust agreement upon which the bonds are issued, and in accordance with which the sinking fund is created, usually provides that the sinking fund be created out of profits. While this practice is theoretically unjust to present stockholders, it is worthy of commendation inasmuch as it frequently enforces conservatism upon

the managers of the enterprise who might otherwise become careless as to the necessity of meeting these obligations at maturity, for it requires that they set aside sufficient reserves annually out of profits to take up the obligations at maturity.

Four uses of secret reserves are :

1. To prevent the undue distribution of dividends where profits are not stable or continuing in character.
2. To provide a means of absorbing sudden losses.
3. To prevent wide fluctuations in the market values of listed stocks of corporations.
4. To provide a reserve to meet possible depreciation in concerns where the assets are of an unstable or wasting nature.

ROYALTIES

Question I

The following item appeared amongst the assets of a coal mining company, of which you are auditor : royalties paid, \$13,430.

Explain its meaning and state whether, and on what conditions, you would allow it to be treated as an asset. (Washington, 1915.)

Answer

Royalties paid represent the amount of expenditure for coal mined from a leased property based on tonnage of production or cubic yards or acreage of seams worked.

Where the lease provides for a maximum royalty per year, and further provides that the lessee may recoup himself for the excess over the minimum production necessary to produce such minimum royalty in periods subsequent to the year covered, the amount of royalties paid may be a good asset. In such a case the expense would be incurred for the period of organization and, when more than the minimum amount of coal was mined after development, the excess above the minimum would be applied to reduce the asset, thus bringing the expense into the period of production.

SELLING PRICE, METHOD OF DETERMINING

Question I

The Cinema Company, leasing moving picture machines for theaters, has 1,000 machines in operation. On January 1, 1915, the company decides to increase the number of its machines 80%, and places an order with the manufacturers of the machines, who agree to complete and deliver the new machines in equal quarterly instalments. The company arranges to borrow \$60,000, by the sale of five-year 6% notes, it being agreed that a sum equal to 20% of the total issue shall be set aside annually out of the profits of the company for the redemption of such notes. The average annual cost for maintenance was found to be \$120 per machine, and \$24,880 was estimated for other expenses.

What annual charge per machine would the company have to make in order to meet its obligations and pay a dividend of 10% on \$200,000 of its capital stock? (New York, January, 1915.)

Answer

Comments on the Problem

Rental, like all well-established sale prices, is intended :

1. To recover all expenses and fixed charges incident to the operations of the business.
2. To provide for the desired amount of profits.

This being a principle of business, no solution can be accepted unless it will give, for the first year of operations, a rate which will be sufficient (on the basis of operating life

of the different instalments of machines) to recover the expenses and provide for the profits.

As a matter of interest to the student, the author submits two solutions of the problem. A third solution could be made by averaging the rental rate for the operating life of the machines.

SOLUTION No. 1

THE CINEMA COMPANY

STATEMENT SHOWING THE ANNUAL CHARGE FOR LEASING MOVING PICTURE MACHINES

Fixed Charges, Expenses and Profit:

Interest on Loan, 6% on \$60,000.....	\$3,600.00
Sinking Fund, to be set aside annually from profits.....	12,000.00
Dividend, 10% on \$200,000.....	20,000.00
Expenses, estimated.....	24,880.00
Total.....	<u>\$60,480.00</u>

Quarterly charges, \$15,120.

Maintenance per machine for one-fourth of a year, \$30.

COST OF MACHINES IN OPERATION, CHARGES AND PROFIT INCLUDED

Year	Machines			Average Quarterly Charge Per Machine
1st Quarter	1,000	Charges.....	\$15,120.00	
		Maintenance....	30,000.00	\$45,120.00 \$45.12
2nd	"	1,200	Charges.....	\$15,120.00
		Maintenance....	36,000.00	51,120.00 42.60
3rd	"	1,400	Charges.....	\$15,120.00
		Maintenance....	42,000.00	57,120.00 40.80
4th	"	1,600	Charges.....	\$15,120.00
		Maintenance....	48,000.00	63,120.00 39.45

SELLING PRICE

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5th Quarter	1,800	Charges.....	\$15,120.00		
		Maintenance....	54,000.00	69,120.00	38.40
			Total for five periods.....		<u>\$206.37</u>

Average charge for one period, \$206.37 divided by 5 equals \$41.274.

Average annual charge per machine, \$165.09.

The annual charge per machine should be about \$170, as the expenses are estimated.

SOLUTION No. 2

THE CINEMA COMPANY

Schedule of charges to be recovered through the rental of machines in operation in 1915, showing the annual rental to be charged per machine for the year 1915:

(1) Maintenance:

1,000 machines for 12 months @ \$120 per year	\$120,000.00
200 " " 9 " @ " " "	18,000.00
200 " " 6 " @ " " "	12,000.00
200 " " 3 " @ " " "	6,000.00

Total Maintenance..... \$156,000.00

(2) Interest on notes payable—6% on \$60,000..... 3,600.00

(3) Other expenses..... 24,880.00

(4) Dividends of 10% on \$200,000 of capital stock..... 20,000.00

(5) Amount to be set aside out of profits for redemption of
5-year notes; 20% of \$60,000..... 12,000.00

Total \$216,480.00

Rate per annum to be charged per machine for 1915, \$166.52+.

PROOF

Income obtainable from lease of machines:

1,000 machines for 12 months @ \$166.52+ per year.....	*\$166,520.00
200 " " 9 " @ " " "	24,979.00
200 " " 6 " @ " " "	16,653.00
200 " " 3 " @ " " "	8,328.00

Total Income obtainable in 1915..... \$216,480.00

*Figures have been rounded off to avoid unnecessary computations.

Schedule of charges to be recovered through rental of machines in operation in 1916, 1917, 1918, 1919:

Maintenance of 1,800 machines for 12 months @ \$120 per machine	\$216,000.00
Other expenses.....	24,880.00
Interest on notes payable—6% on \$60,000.....	3,600.00
Dividends—10% on \$200,000 of capital stock.....	20,000.00
Amount to be set aside out of profits for redemption of 5-year notes—20% of \$60,000.....	12,000.00
Total amount to be charged for lease of machines in 1916, 1917, 1918, 1919.....	\$276,480.00
Rate per annum to be charged per machine 1916, 1917, 1918, 1919.....	\$153.60

SINGLE ENTRY

Question I

How would you obtain the profit or loss of a concern whose books are kept by single entry? (Ohio, 1915.)

Question II

How would you arrive at the profit or loss of a firm for a given period operating under a single-entry system of accounts? (Nevada, 1915.)

Question III

How would you determine the profits for a given period from a set of books kept on the single-entry system, the capital at the beginning of the period being known? (Maine, 1915.)

Answer to Questions I—III

To obtain the profit or loss of a concern whose books are kept by single entry, subtract from the net worth at the end of the period the net worth at the beginning. Usually the difference is a positive amount, but in case of loss it should be treated as a negative item. To this amount add drawings of partners and subtract additional investments if any. If the final result is a positive figure, it indicates a net profit; if otherwise, a net loss for the period.

STOCK-BROKERS

Question I

The following is a trial balance of a firm of stock-brokers doing business under the name of Adams & Jones:

Customers	\$10,500,000.00	
Customers		\$250,000.00
Cash	150,000.00	
Loans		9,500,000.00
Borrowed on Loan Account*.....		110,000.00
Investments	580,000.00	
Furniture and Fixtures.....	3,600.00	
Interest		33,400.00
Commission Account.....		190,600.00
Expenses	34,400.00	
Adams		650,000.00
Jones		534,000.00
	<u>\$11,268,000.00</u>	<u>\$11,268,000.00</u>
Stocks Borrowed.....		\$370,000.00
Stocks Loaned.....		480,000.00
Commissions Due Other Brokers.....		1,500.00

*The "Borrowed on Loan" account should properly be styled "Borrowed and Loan" account, and the balance of \$110,000 is the difference between Stocks Borrowed \$370,000 and Stocks Loaned \$480,000, both given in the question.

Interest Accrued on Loans.....	3,040.00
Stocks Pledged to Secure Loans.....	11,400,000.00
Stocks in Transfer.....	130,000.00
Stocks Loaned to Other Brokers.....	486,000.00
Stocks on Hand.....	384,000.00

Prepare, in technical accounting form, a financial statement of the firm. (New York, June, 1915.)

Answer to Question I

ADAMS & JONES

FINANCIAL STATEMENT AT JUNE 30, 1915

Assets

Due from Customers.....	\$10,500,000.00	
Cash	150,000.00	
Investments	580,000.00	
Stocks:		
Pledged as Collateral.....	\$11,400,000.00	
In Transfer.....	130,000.00	
Loaned to Brokers.....	486,000.00	
In Safe.....	384,000.00	12,400,000.00
Stocks Borrowed.....	370,000.00	
Furniture and Fixtures.....	3,600.00	
		\$24,003,600.00

Liabilities

Due Customers.....	\$250,000.00	
Loans	9,500,000.00	
Stock Loans.....	480,000.00	
Market Value of Securities.....	12,400,000.00	
Liabilities Accrued:		
Commissions	\$1,500.00	
Interest	3,040.00	4,540.00
Adams	742,530.00	
Jones	626,530.00	
		\$24,003,600.00

Question II

A firm of stock-brokers find that, owing to the conditions now prevailing in the market, their present system of accounting, in so far as it applies to ascertainment of the condition of customers' accounts, does not adequately meet the demands placed upon it. There also appears to be congestion in the order room and difficulty in making prompt deliveries. You are called in to investigate their requirements and submit recommendations. Write a report briefly outlining your suggestions, together with rough draft forms. (Pennsylvania, 1915.)

Answer

The first requirement of the problem seems to call for an adequate margin system whereby the condition of customers' accounts could be ascertained at once and with minimum effort:

1. Separate the active and inactive margin cards which reflect the speculative transactions of customers. The active list would then command the attention of the clerk keeping the records, while the inactive customers' accounts would require only occasional examination.

2. Where there are many active accounts, the cards could be divided between two clerks. As soon as transactions are made and entered into the purchases and sales books, the margin clerks are to transfer the records of commitments to their respective cards.

3. If instead of carrying out the "dollar value" of stocks the "differences" method were employed in calculating market loss or gain, much time could be saved, as illustrated by the two forms on page 374.

The valuation method makes it necessary for the clerk to extend market values every time the price of the stock

VALUATION SYSTEM		
LONG	STOCK	VALUE
* \$100.00	* Union Pacific	† \$13500.00
	Total Value Stocks	† \$13500.00
	Deduct Debit Balance	* \$12800.00
	Dollar Margin	† \$700.00

Debit Balance	Point Margin
* \$12800	† 7

[illegible]

†Variable items.

changes, and where more than one security has been bought it means also added work in footing up these amounts to arrive at the result required, viz., the loss or gain at the market price. Under the "differences" method, this information is obtained by fewer operations.

4. It would also be advisable to have a quotation ticker affixed to the working desk of the margin clerks instead of causing them to consult the quotation board or stock tickers situated in the customers' rooms. Few brokers' offices have accepted this suggestion, and for that reason it will be found that in very active markets the margin men find it necessary to be kept posted on prices by either the quotation board boy or by running back and forth between the working room and the outside office.

The congestion in the order room is undoubtedly caused by the fact that the clerk in charge does not number his orders and reports of executions. By giving a number to each order when telephoning over to the Stock Exchange, and thereby identifying each order and report of execution, the order clerk is in a position to report almost immediately to the customer.

On the purchase side of the order sheet, odd numbers could be used and all even numbers are to represent selling orders. For instance, Nos. 1, 3, 179, etc., would indicate buying orders; hence the word "buy" need not be included as part of the instruction to the member executing the order. Similarly, No. 512 would represent a selling order which, let us say, is for 100 shares Union Pacific at the market. The order clerk would ring on the private phone connecting the office with the Stock Exchange and he would say "No. 512 100 Union Pacific market." In reporting the execution of the order, the following would be said, "No. 512 100 Union Pacific 151." On the order sheet No. 512 is also identified with the customer. For that reason the reported

execution could be immediately conveyed to the customer in writing.

Difficulty in making stock deliveries could be easily overcome by employing several blotter and stock clerks. Each clerk has before him the delivery page of the blotter which contains one or two issues of the stocks and bonds to be delivered. A staff of "runners," say two for each stock clerk, could make delivery within the prescribed delivery hours, or deliveries could be routed and, with a dozen messenger boys under the direction of a chief, the delivery of stock becomes a simple matter. The chief allots a number to each delivery to be made and makes a memorandum on his delivery sheet of this numeral together with the amount of cash to be received. The checks which are brought in as payment against deliveries of stocks bear the same numbers as the bills of sales attached to the shares, the messenger boys being instructed to place this number in the corner of the check received.

Either of these two methods of delivery gives satisfactory results. The former method is more in use among "odd-lot houses," where deliveries assume tremendous proportions, while the latter is mainly a temporary device used by stock-brokers in very active markets, whose normal business does not warrant extensive delivery system.

SURPLUS ACCOUNT

Question I

How should substantial changes in the value of capital assets be treated in the accounts in respect to surplus? (Massachusetts, 1915.)

Answer

Such items should be credited (if an increase) or debited (if a decrease) direct to Surplus account, as they are not caused by the ordinary operations of the period, and for this reason must not be included in the Profit and Loss account.

It is becoming more and more common to set up a special account, called "Capital Surplus," "Special Surplus," or similar title, to contain surplus that does not arise from earnings. This does no harm, though it seems rather useless. The reason given for such a course is usually that if unearned surplus is mingled with earned surplus, dividends may be declared therefrom; and it is a common belief that dividends should be declared only from earnings. However, there is no legal or logical basis for this opinion. If a corporation has an actual surplus, whether it appears in one account or in several, it is legal to declare a dividend; and if there is ample cash, there is no reason why this should not be done.

TERMINOLOGY, ACCOUNTING*

Question I

(a) Why should we favor the standardization of accounting terminology and forms?

(b) What means would you suggest as best adapted to obtain such uniformity?

(c) Give *two* examples of accounting terms that are ambiguous. Suggest remedies. (New York, June, 1915.)

Answer

(a) The standardization of accounting terminology

*See also Part II, "Accounting Terminology," pages 390-408.

should be favored in order that terms used in balance sheets and auditors' reports may be universally understood to mean something definite and fixed. If accountancy is to take its place as a science, its teachers and practitioners must agree on its terminology in order to obtain the accuracy and precision that any real science must possess. Under present conditions it is possible for dishonest concerns to cover their real financial standing under the guise of terms that have no common interpretation, while if accounting terms were standardized such fraudulent practices would eventually be eliminated.

(b) Through some such national association as the Institute of Accountants in the United States of America. By the appointment of a committee to invite suggestions and to co-operate with the various accounting schools throughout the entire country, a number of terms could be definitely interpreted and published for the guidance of practitioners and text writers. On disputable terms no final action should be taken until their use has become more fully determined.

(c) 1. "Profit and Loss Account." Among some trading and industrial concerns the term is used to designate the account in which all revenue or income, and all expenses or disbursements for the period are collected. Among others again, it is used to refer to a second section of the account in contradistinction to the Trading account.

2. "Account" and "Statement." The former should be restricted to the technical ledger form; the latter to the untechnical, more or less narrative form.

TREASURY STOCK

Question I

How is "Treasury Stock" created on the books of a company? (Nevada, 1915.)

Answer

Treasury stock is created on the books of a company by the donation back to the company, or purchase by it, of its own capital stock which has previously been issued at par value. On the books the entry consists of a charge to Treasury Stock and a credit to some outgoing asset or to a reserve or special surplus account for treasury stock.

Question II

(a) A and B, partners, organize a corporation with a capital stock of \$500,000, to take over their business. The corporation issues its entire capital stock to A & B in payment of their plant and equipment, which is valued at \$300,000. The entry recording this transaction is as follows:

Plant	\$500,000.00	
To Capital Stock.....		\$500,000.00

For the purpose of furnishing working capital, A and B each donate to the corporation \$100,000 of their stock. What entry would you suggest, to show the exact state of affairs at this point?

(b) Assuming the plant to be valued at \$500,000, give the proper entry to record the stock donation.

Give reasons for your entries. (Kansas and Missouri, 1915.)

Answer

(a)

Treasury Stock.....	\$200,000.00	
To Plant Account.....		\$200,000.00
To record the donation to this company of \$200,000 of capital stock issued at par to the donators, A and B, in payment for plant and property sold to this company by them. The donation is now used to reduce the book value of the plant purchased.		

The above entry is given to present the most conservative method of handling the transaction. Tangible assets should not be overvalued, but, if it is desired to maintain the purchase price at \$500,000, then it would be better and, certainly less deceiving, to place good-will or patents on the books at \$200,000, thus revealing the intangible asset.

(b)

Treasury Stock.....	\$200,000.00	
To Reserve for Treasury Stock.....		\$200,000.00
To record the donation, etc. The donation is set up as an asset with a corresponding reserve to offset its book value.		

Here the plant is valued at \$500,000 and the entry is a simple stock donation. The reserve is created, in preference to a credit to Surplus, in order that the donation surplus may be reserved from surplus out of which dividends may be declared, at least, until such time as the treasury stock may be sold and its real value determined.

TRUST ACCOUNTS

Question I

Give an outline in considerable detail of the method of accounting you would recommend for a trust company to provide for proper record of individual trust accounts. Illustrate by appropriate forms. (Pennsylvania, 1915.)

Answer

The record of these accounts would depend in a measure upon the class of trust account to record. For illustration the following is a simple method for recording an estate account.

Upon receipt of an estate and upon all subsequent transactions, a ticket or preferably a journal entry would be made showing all the assets received, and postings made to the register of securities and ledger account.

Register of Securities. All assets (excepting cash) such as stocks, bonds, mortgages, notes, real estate, household furniture, jewelry, etc., should be listed with their appraised value, and, if no appraised value, some arbitrary amount should be placed on each item for the purpose of proving vault inventory. If any securities, etc., are disposed of, a record is shown in the proper column.

Ledger Account. All assets (including cash) to be listed at appraised or arbitrary values; the Principal account is charged with cash items, Securities account is charged with security items, and Estate account is credited. If any security is sold belonging to principal, Securities account is credited and Principal account charged. If a profit results from such sale, Securities account is charged and Estate account credited. If a loss results, Securities account is credited and Estate account charged.

(Name of Account)

[illegible]

(Name of Account)

[illegible]

All disbursements made are credited to Principal or Income account according to the character of the item.

In case of purchase of securities, Securities account should be charged; for other items Estate account is charged. All receipts of income are charged to Income account and credited to Estate account. All disbursements to beneficiaries of income are credited to Income account and charged to Estate account. Disbursements of principal are credited to Principal account and charged to Estate account.

Forms of register of securities and ledger are given on page 382.

UNCOMPLETED CONTRACTS

Question I

A construction company at the close of its fiscal period has a number of uncompleted contracts in various stages of progress.

How should they be treated in closing the books?
Explain fully. (Massachusetts, 1915.)

Answer

Each contract should have a separate detailed account, to which are charged, at cost, labor, material, and expense. If examination shows that these accounts have been charged with any part of the estimated profit that will be realized when the contract is finished, the amount of such profit should be carefully investigated. While it would appear conservative, in view of possible contingencies, to leave out of account all profit on contracts not completed, such a course is not necessary, nor indeed would it be proper in the case of large contracts. A proportion of the estimated profit on a whole contract, based upon the portion thereof that has been finished, estimated conservatively, must be regarded as an allowable asset. It is preferable, however, not to charge such estimates direct to the contract accounts, but to a special account for the purpose. The item of contracts in progress might well be shown in the balance sheet as follows :

Contracts in progress, cost to date.....	\$.....
Estimated profits already earned thereon.....	.....
	\$.....
Less amounts received on account.....	.....
Net equity of company in contracts in progress.....	\$.....

On the other hand, if any of the contracts in progress are known to show a loss, such loss should be taken into account. Profits *may* be shown, losses *must* be shown.

VALUATION

Question I

State and differentiate, for balance sheet purposes, the rules of valuation that apply in the following:

- (a) Long-time bonds bought at a premium for investment, the market value of which has advanced.
- (b) Dividend-paying stocks bought for investment, the market value of which has declined.
- (c) Long-time bonds bought at a discount for speculation, the market value of which has advanced,
- (d) Real estate (land) that has appreciated. (Maine, 1915.)

Answer

- (a) Cost less amortization of the premium.
 - (b) Cost price.
 - (c) Market price or cost price, with present market price stated in a footnote.
 - (d) If it is a fixed asset it should be valued at cost, usually considered as the value to a going concern without regard to appreciation.
-

VOUCHER SYSTEM

Question I

Explain the voucher system in detail. (Michigan, June, 1915.)

Question II

What is meant by the voucher system of bookkeeping? Describe the voucher record book. (Maine, 1915.)

Question III

- (a) Describe a voucher record system.
- (b) What are its advantages and disadvantages? (Massachusetts, 1915.)

Answer to Questions I-III

(a) A voucher record or voucher register, is a columnar book for classifying the various costs and outlays of a business. Every bill received, after being approved for receipt of goods, prices, and extensions, is marked with the account or accounts to be charged, and the amount chargeable to each; the bill is also given a number from the voucher register; or this information may be shown on a slip attached to the bill, numbered to correspond with the entry in the voucher register. The register contains columns for the voucher number, date of invoice, date of payment, one or more columns for the total amounts, or credits, and a series of columns for the various accounts to be debited, with a sundries column for unusual items. At the end of the month the columns are all footed, the total of the first column is credited to Vouchers Payable, and the totals of the distribution columns are debited to the proper accounts. The cash book must contain a column for vouchers paid, the total, of course, being debited to the Vouchers Payable Account. The balance of the Vouchers Payable account may be proved both by listing the unpaid vouchers in the file and by listing the items in the voucher register against which no date of payment is noted.

- (b) No purchase ledger or creditors ledger is carried,

the work of keeping ledger accounts with individual creditors is eliminated, and most of the expense accounts will require only one posting a month, so that the work of posting is reduced.

On the other hand, partial payments of bills, i.e. payments "on account," are practically impossible with this system; furthermore, the voucher system does not readily show the total present balance due a given creditor, or the total amount of business done with a given creditor for a given period.

WAGE SYSTEMS

Question I

Name nine general methods or plans of paying wages, and describe the three which you most prefer. (Minnesota, 1915.)

Answer

1. Time basis; a flat rate per hour or day.
2. Piece rate; a flat rate per unit produced.
3. Premium basis; a flat rate per hour with a premium for saving in time.
4. Bonus plan; a flat rate per unit produced with a bonus for increasing the number in a certain period.
5. Differential rate; the rate per hour increases as the number of units produced increase with a consequent saving in overhead to the company.
6. Taylor system; a rate is fixed as a standard time for a job, and piece rates are based on that standard with higher rates for increased efficiency.
7. Towne-Halsey system; the standard is the lowest time in which the job has been done, with a premium if that time is lowered corresponding to a percentage of the saving.
8. Rowan system; a standard time rate with an allowance of a bonus based on such a percentage of the regular wage as the time saved bears to the standard time.
9. Emerson system; standard time in which the work should be done and a premium for efficiency based on 100% efficiency, but the bonus starts at $66\frac{2}{3}\%$.

The three most preferred would be a matter of individual preference.

Part II—Accounting Terminology

Definitions of the following accounting terms were called for by the C. P. A. examinations held in the various states during the year 1915. The definitions given are those sanctioned by the best accounting authorities and should form part of the vocabulary of every well-informed accountant. Many definitions have been taken from Year Books of the American Association of Public Accountants.

A

ACCOUNTING. Accounting is the science which treats of the systematic record, compilation, and presentation in a comprehensive manner of the financial operations of a business.

ACCOUNT RECEIVABLE. An account showing a debit balance to be presently received in cash or its equivalent.

ACCRUAL. (1) The act of accruing. (2) That portion of an accruing account not yet due applicable to the period under consideration.

ACCRUED EXPENSE. A liability on account of expenses incurred but not yet paid.

ACCRUED INCOME. An asset account showing income earned but not yet received.

ACCRUED INTEREST. (See "Accrued Income.")

ACCUMULATION. If a bond is purchased at a discount, the actual return on the money invested will be greater than the nominal rate of the bond, and the difference should be added to the cost of the bond, so that at maturity the book value of the bond will appear par. This process is called accumulation.

ADVENTURE ACCOUNT. "Adventure Account," or "Venture Account," is a title frequently applied on the books of the consignor to specific shipments on consignment when made the subject of separate accounts. (See also "Joint Venture Account.")

ADVENTURE JOINT ACCOUNT. (See "Joint Venture Account.")

ALLOCATE. To allot, apportion, or assign; to set apart.

ALLONGE. A slip of paper attached to a negotiable instrument to receive indorsements for which there is no space on the instrument itself.

AMORTIZATION. The gradual extinguishment of the amount of an asset, liability, profit or loss, prorating it over the period during which it will exist or during which its benefit will be realized.

The gradual extinction of a debt, as, for instance, by means of a sinking fund.

The gradual reduction in the valuation of an asset, thus anticipating the time when it shall eventually become worthless.

The absorption in the Income or Profit and Loss accounts, during the pendency of the debt, of a discount incurred or of a premium realized in the sale of an obligation.

ANALYZING A LEDGER. Obtaining the individual components of the complex accounts recorded in the ledger.

ANNUITY. A fixed sum of money granted or bequeathed, payable yearly or at certain regular periods.

APPRAISAL. The result of a valuation of property or other assets, used mostly in connection with the valuation of fixed assets of a corporation.

APPRECIATION. Increase in value through improvement in condition or market value, applied in respect of real estate, plant, machinery, securities, etc.

ARTICULATION STATEMENT. An analysis statement of entries recorded under specific headings so arranged as to show accounts as well as the books of entry in which the items originated.

ASSIGNED ACCOUNTS. Accounts originally due to one person who has by agreement made them payable to some other person, usually his creditor.

B

BALANCE SHEET. A statement showing the financial position of a business at a specific date, viz., its assets and liabilities, the capital employed, as well as any reserves, surplus, or deficiency there may be.

BANK OF DISCOUNT. A bank authorized by law to lend money on personal notes.

The term bank, when used in this chapter means any monied corporation authorized by law to issue bills, notes, or other evidences of debt for circulation as money, or to receive deposits of money and commercial paper and to make loans thereon, and to discount bills, notes, or other commercial paper, and to buy and sell gold and silver bullion or foreign coins or bills of exchange. (N. Y. State Banking Law.)

BUDGET. A statement of the estimated revenues and expenditures for a given future period.

BURDEN. (See "Overhead.")

C

CAPITAL. This term as used in accounting is employed to express:

The sum of the net assets of a business or undertaking.

The sum which remains after deducting the liabilities from the assets of a business or undertaking.

Any principal sum (usually in cash, sometimes in property) contributed to an undertaking by a partner or other individual for supplying the means to operate such undertaking.

The value or amount any individual has invested in an undertaking.

Any principal sum which is used or retained to produce income or profit.

CAPITAL ASSETS. Includes real estate, buildings, and other structures, equipment and other personal property of a more or less permanent character, and cash on hand specifically applicable to these assets.

CAPITAL EXPENDITURES. All sums expended for addition to, or improvement of, properties.

CAPITAL LIABILITIES. Liabilities incurred in the acquisition of capital assets.

CAPITAL RECEIPTS. Cash received from stockholders in a corporation in payment of their subscriptions to the capital stock.

CAPITAL STOCK. The amount of share capital (issued or authorized) of a company or corporation.

CASH. Lawful money. Usually understood to include checks or such other instruments as are received by banks for deposit.

CASH DISBURSEMENTS. Cash payments made during a stated period regardless of the purpose of the payment.

CASH PAYMENTS. (See "Cash Disbursements.")

CASH RECEIPTS. Cash received during a stated period regardless of the purpose for which received.

CHATTEL MORTGAGE. A lien upon personal property, given by the owner as security for the payment of a debt or the performance of some other obligation. Upon default, such lien may be perfected into an absolute title by foreclosure and sale.

CLOSING ENTRIES. Entries made upon the books of account at the end of a fiscal period for the purpose of closing the accounts.

CONSIGNMENT ACCOUNTS. Those accounts which cover the consignment of goods to an agent or consignee.

CONSOLIDATED BALANCE SHEET. A balance sheet which exhibits the combined financial condition of a number of business organizations.

CONSTRUCTION ACCOUNT. An account employed to show the cost of construction of a piece of property. It is usually made to contain all items, such as material, labor, expense, entering into the work; in some cases interest on borrowed money is charged against this account and even the discount on the sale of bonds issued for the work.

CONTINGENT FUND. Money set aside to be drawn upon only in case of certain emergencies.

CONTINGENT LIABILITY. An amount which may become due subject to a preceding event and depending on future circumstances.

COSTS INCURRED. All expenditures, whether paid in cash or not, for which a business has become liable.

CURRENT ASSETS. Those assets which can be readily converted into cash.

CURRENT LIABILITIES. Amounts owed subject to constant change, such as accounts payable to creditors, becoming due and payable in short periods.

D

DEFERRED CHARGES TO OPERATIONS. That part of operating expenditures which is paid within a given period but is not properly a charge against the income of that period and therefore is deferred or postponed until a period following.

DEFERRED CREDIT. That part of revenue which is received within a certain period but is not properly a credit to the income for that period and therefore is deferred or postponed until a period following.

DEFERRED DEBIT. That part of expenditures which is paid within a certain period but is not properly a charge against that period and therefore is deferred or postponed until a period following.

DEPARTMENTAL ACCOUNTS. A system of accounts which covers the separate workings of the departments of any concern, usually in relation to the profit or loss made by such departments.

DEPRECIATION FUND. Cash or other assets set aside to provide for depreciation of plant, property, etc.

DEPRECIATION RESERVE. A part of the earnings set aside and carried as a credit to offset any deterioration of assets which has taken place or is likely to arise.

DIMINISHING ASSETS. Assets which diminish by realization or use.

DISBURSEMENTS. Cash payments made during stated period, regardless of the purpose of the payment.

DIVIDEND ACCOUNT. The controlling account in the general ledger of any corporation to which is credited the amount of dividend on the day of declaration and to which are charged checks issued in payment thereof, either "en bloc" or as they may be presented for payment.

E

EFFECTIVE INTEREST RATE. The ratio of the amount earned to the actual amount of money invested, as distinguished from the nominal rate which is figured on the par value of the bond or other investment.

EFFECTIVE RATE. (See "Effective Interest Rate.")

F

FINANCIAL STATEMENT. A balance sheet. Sometimes taken to include all other statements, such as a statement of affairs or statement of income and profit and loss.

FINISHED PRODUCT. The article of trade of a manufacturing concern which has been completed and is ready for sale.

FIXED ASSETS. Such assets as are stationary and may be regarded to a certain extent as permanent, such as real estate, buildings, plant, machinery, etc. The term "Fixed Assets" and "Fixed Capital" are frequently interchanged, but preference is given to the former term.

FIXED CAPITAL. (See "Fixed Assets.")

FIXED CHARGES. Charges which remain comparatively unchanged during long periods of time, such as interest on bonds, debentures, etc.

FIXED LIABILITIES. The permanent or ultimate obligations as distinct from the current obligations (or floating indebtedness) of a person, firm, or corporation.

FLOATING ASSETS. Same as liquid, sometimes called "Circulating Assets."

FLOATING CAPITAL. Capital which is not in a fixed or permanent shape, but is available or convertible, such as raw material, book debts, cash, etc.

FLOATING DEBT. (1) That portion of a debt of a corporation or undertaking which is not represented by a bond issue. (2) General or ordinary indebtedness.

FLOATING LIABILITIES. Amounts which are due to others or are about to become due, as creditors' accounts and bills payable.

FUNDED DEBT. That portion of a debt which is represented by a bond issue and payable at a distant date.

FUNDED INDEBTEDNESS. (See "Funded Debt.")

G

GENERAL BALANCE SHEET. A balance sheet by totals, i.e., one which shows the financial condition of a company by group accounts without regard to detail.

GOOD-WILL. Good-will represents the value attached to a business over and above the value of the physical property. (U. S. Treasury.)

Good-will is the monetary value placed upon the connection and reputation of a mercantile or manufacturing concern, and discounts the value of a turnover of a business in consequence of the probabilities of the old customers' continuing. (Lisle.)

GROSS PROFIT. In commercial bookkeeping, the difference between the cost of goods bought or manufactured and the selling price thereof.

H

HYPOTHECATE. To pledge or mortgage.

I

IMPERSONAL ACCOUNTS. Accounts which represent condition and record the profits, losses, receipts, expenditures, assets, and liabilities, but do not represent persons.

IMPREST CASH. (See "Imprest System.")

IMPREST SYSTEM. A system for making petty cash disbursements whereby the petty cashier is reimbursed for the exact amount disbursed, the original amount of the petty cash fund remaining unaltered. The reimbursing check is charged to the proper expense accounts for which the petty cash payments have been made.

INCOME. The account which sets forth the entire income for a fixed period whether actually received or not.

The gain which proceeds from property, from manufacturing and selling, or from buying and selling.

The remuneration derived from skill or labor.

The proceeds of the property of an estate.

INCOME BOND. A long-term promissory note the interest on which is payable out of income if earned.

INTEREST ACCOUNT. A revenue account to which is debited and credited interest incurred or earned whether paid or not.

INVENTORY. (1) The annual account of stock of a business. (2) A schedule of assets or property. (3) An itemized list of goods or valuables with prices attached.

J

JOINT VENTURE ACCOUNT. An account covering a specific shipment of consigned goods to be sold for the benefit of two or more parties. (See also "Adventure Account.")

L

LEGAL ASSETS. Property which creditors might make available in a court of law for the payment of the debts of a deceased person.

LIFE TENANT. The beneficiary under a will who enjoys the income from an estate during life.

LIQUID ASSETS. Cash and such assets as can readily be converted into cash.

LOSS AND GAIN ACCOUNT. The same as "Profit and Loss Account." In one sense the title "Loss and Gain Account" is better than "Profit and Loss" by reason of the position in which the words are placed.

M

MAINTENANCE RESERVES. A reserve to which may be charged expenses in connection with maintaining some asset for which the reserve has been created.

MANUFACTURING ACCOUNT. An account subsidiary to Profit and Loss account for the purpose of showing the result of factory operations separately from the trading.

MATERIAL ACCOUNT. An account used to control the amount of material on hand in a manufacturing concern. The account is charged with purchases and credited with issues to factory. The balance should agree with the inventory of material.

MERCHANDISE ACCOUNT. An account intended to represent the trading transactions of a business, and to exhibit gross profit made on same. An account to which are charged the purchases of material to be sold or used in manufacture, and to which may be credited the materials sold or used.

N

NATIONAL BANK NOTES. Promissory notes issued by national banks and circulating as money. Such notes are fully secured by United States bonds purchased by the issuing bank and deposited in the United States Treasury.

NET INCOME. After all costs of operation and fixed charges of every kind have been deducted from the earnings of a corporation, the balance, which is the amount available for dividends, may be called "net income."

NET PROFIT. The balance remaining after all expenses of distribution and establishment charges, discount, interest, etc., have been deducted from the gross profits.

The balance of the Profit and Loss account when the same is a gain.

The surplus remaining over from the employment of capital after defraying all the expenses and outlay incurred in its employment, and after the capital has been replaced or provision made for its replacement.

NOMINAL ACCOUNTS. Accounts which represent income or expenditures. Accounts used for the purpose of classifying income and expenditures under such heads as rent, taxes, discounts, sales, purchases, etc., forming the material for the construction of the Profit and Loss account.

NOMINAL INTEREST RATE. The rate of interest on bonds figured on the par value of the bond.

NOMINAL RATE. (See "Nominal Interest Rate.")

O

OPERATING EXPENSE. The expense incurred in the regular transactions of a business.

OVERHEAD. Elements of cost which cannot be definitely assigned to any particular job, or series of jobs, but are a part of the expense of manufacture, and must be taken into account in calculating costs.

P

PAY-ROLL ADVANCES. Wages paid in advance.

PERSONAL ACCOUNT. Accounts showing the transactions with persons, as customers' and creditors' accounts.

PLANT ACCOUNT. An account the debit balance of which represents the value of land, buildings, and sometimes machinery and fixtures, of a business concern.

PRESENT WORTH OF DEFERRED PAYMENT. An amount which if put at interest will at maturity amount to the deferred payment.

PROFIT AND LOSS ACCOUNT. An account showing the net income, i.e., the excess of revenue over expenditure, for a given period.

PROPRIETARY INTEREST. The interest of a proprietor or partner. A partner has a proprietary interest in all of the assets of the firm.

PURCHASE LEDGER. A subsidiary ledger containing accounts with creditors—accounts payable—usually controlled by an account in the general ledger.

Q

QUICK ASSETS. (See "Current Assets.")

R

RATIO OF INCREASE. An amount represented by adding 1 to the decimal denoting the interest rate, as 1.03. The ratio of increase for \$1 for two years at 3% is $(1.03)^2$. (Sprague.)

REAL ACCOUNT. Represents the value of an actual asset, or the amount of an actual liability, such as real estate, machinery, loans, and mortgages. (American Encyclopedia.)

REALIZATION AND LIQUIDATION ACCOUNT. An account showing the result of the liquidation of a business or estate.

REDEMPTION FUND. A sinking fund established for the payment of redeemable debentures, funded debt, or other obligation. An amount set aside at regular intervals from profits which will be sufficient to discharge an obligation at maturity. A reserve fund. (American Encyclopedia.)

A fund accumulated to redeem outstanding obligations at the end of a certain time.

In the first definition the fund is considered a credit. In the second definition the fund is treated as a debit. The general practice of today is to restrict the use of the word "Fund" to a debit account representing actual cash on hand.

REMAINDERMAN. The beneficiary under a will to whom the estate passes at the death of an intermediate party, called

the life-tenant, who enjoys the income from said estate throughout life.

RESERVE FUND. It is a fund set aside for any special purpose and should always represent actual cash. (Keister.)

Cash set aside out of the general funds, usually measured by a reserve (credit), both the fund and the reserve being created for some specific purpose. The reserve (credit) represents the profits withheld, while the fund shows the amount of cash available for the specific purpose.

REVENUE. (See "Income.")

REVENUE ACCOUNT. A term sometimes used to designate Profit and Loss account.

An account which relates to profits and losses, income and expenditures, as distinguished from capital accounts which relate to assets and liabilities. (American Encyclopedia.)

A revenue account is used by non-trading concerns to determine the amount of net income earned. It is charged with the debit balances of all nominal accounts and credited with those with credit balances. (Tipson.)

An account showing the amount of business done—the amount of expenditure—and the amount of surplus or profit. (Montgomery—Dicksee.)

An account of the revenue derived from the business in which we are engaged; in other words an account of our gross gain or profit. (Rahill.)

Note: The last definition takes into consideration only the profit side of what is usually called a "Revenue Account." Another definition by this author includes items of cost, expenses, or losses.

REVENUE ACCRUED. That which has been earned since the last receipt of revenue but is not due and has not been received.

REVENUE BALANCE SHEET. In municipal accounting, a balance sheet of current assets and liabilities, showing cash and amounts due from current revenues and the liability thereon due to appropriations.

REVENUE EXPENDITURES. Expenditures made in connection with the running expenses of the legitimate business of the firm or corporation concerned. (American Encyclopedia.)

What is spent to earn a revenue. (Tipson.)

That which is made to conduct a business, but by means of it no permanent asset is required. (Tipson.)

Whatever is expected to be consumed during the earning period should be charged to revenue. (Cole.)

If it has only had the effect of putting the earning power of the undertaking upon the same footing as that which had previously obtained, it must be charged against revenue. (Montgomery—Dicksee.)

REVENUE RECEIPTS. They are distinguished from capital receipts by being exclusively derived from the sale or exchange of the commodities which the company was organized to buy and sell, the excess of receipts over expenditures constituting net profit or added actual capital—as money received from customers' accounts. (American Encyclopedia.)

Revenue receipts are all the other sources of income of a business (as distinguished from capital receipts). (Tipson.)

Made to cover all profits whether realized or not, even when arising from an estimated rise in value of fixed assets, or when not incidental to the nature of the business. (Montgomery—Dicksee.)

Receipts derived as the direct result of trading, as distinguished from capital receipts resulting from the sale of capital stock, or proceeds of bonds, mortgages, etc.

S

SECRET RESERVES. Values of assets in excess of those indicated by balance sheet.

SERIAL BONDS. An issue of bonds payable in instalments.

SHIPMENT ACCOUNT. Corresponds to "Adventure Account" but is the account on the books of the consignee.

SINGLE NAME PAPER. A note for which a single individual, firm, or corporation is responsible for payment; a note bearing but one signature and without indorsers.

SINKING FUND. An amount set aside to provide against anticipated losses on redemption of debentures, expiration of leases, etc., and specially invested. . . . A species of financial arrangement by means of which a fund is created to redeem or extinguish a debt either already incurred or about to be incurred. . . . The distinction between sinking fund and reserve fund is that the former is a sum set aside and specially invested, thereby appearing on the balance sheet as an asset. The sinking fund represents cash invested; the reserve fund represents undivided profits and may at any time at the option of the directors be transferred for purposes of dividends. (American Encyclopedia.)

A fund set aside out of assets and accumulated at interest for the purpose of meeting a debt. (Tipson.)

Such funds must always be utilized in something which can be converted into cash at once. (Cole.)

An amount set aside and specifically invested for the purpose of meeting a future loss upon redemption of bonds issued at a discount, renewal of leases, etc. (Montgomery—Dicksee.)

A certain sum of money set aside to provide for the payment of bonds or other obligation maturing at some future time. (Keister.)

STATEMENT OF AFFAIRS. An exhibit of the assets and the liabilities of an insolvent debtor, so arranged as to show on one side all the assets of the concern with the amounts they are expected to realize extended into another column, and on the other side all the concern's gross liabilities with the amount expected to rank carried into a separate column.

STATEMENT OF ASSETS AND LIABILITIES. A statement of financial condition of a solvent concern, where the books are kept by single entry, is best designated as a "Statement of Assets and Liabilities."

STATEMENT OF INCOME AND EXPENSE. A statement which shows the income earned and expenses incurred during a certain period, it being immaterial whether or not the items are actually received or disbursed during that period.

STATEMENT OF RECEIPTS AND DISBURSEMENTS. A statement arranged in report form, showing respectively with regard to cash, the balance at the beginning of a period, the classified receipts and disbursements during the period, and the balance remaining at the end of the period.

A summarized cash account, stating the amounts of money actually received and disbursed during the period to which it relates, without regard to whether the same are earnings or expenses exclusively appertaining to that period, or include items so appertaining to the period preceding. It starts with the cash balance at the commencement of the period which it covers, and concludes with the cash balance at the close thereof.

STATEMENT OF RECEIPTS AND EXPENDITURES. (See above.)

STATEMENT OF RECEIPTS AND PAYMENTS. (See above.)

SUMMARY ACCOUNT. An account into which a number of

detail accounts are closed for the purpose of showing a general result.

SURPLUS. The excess of assets over liabilities. . . . The credit balance of a profit and loss account. (American Encyclopedia.)

Excess of assets over liabilities, including capital stock. It is really undistributed profit. (Tipson.)

Net surplus over and above all debts, reserves, and fund accounts.

SURPLUS ACCOUNT. (See "Surplus.")

SURPLUS FUND. A credit account formed by periodically setting aside a portion of the net profits of a corporation—to provide an unspecified reserve for contingencies. (Tipson.)

In the National Banking Act, a fund created by setting aside one-tenth of the net profits until 20% of the capital has been so reserved from dividends.

T

TRADING ACCOUNT. A trading account is designed to show the gross profit on trading, i.e., the total excess of the amount charged for goods sold over their purchase price together with any expense attendant on their acquisition. The purpose is to show the amount of purchases, sales, returns to creditors, and the expenses attending same. (Tipson.)

Shows the elements of net principal income. (Cole.)

The merchandise (or trading) account of a mercantile company, designed to show gross profit on trading. It includes freight.

Deals with purchase costs and proceeds of sales. Cost includes outlay for materials, freight, duty, and other charges incidental to the acquisition of the raw product; also labor and costs of manufacture.

TREASURY STOCK. Capital stock unsubscribed, or of which a corporation has acquired possession from its original owners. Stock set aside for sale in order to raise working capital. (American Encyclopedia.)

Commonly bought on the assumption that it has been paid for, issued and returned to the treasury. (W. H. Emrich.)

Issued and outstanding stock of the company that has been donated to or purchased by the corporation and which is held subject to disposal by the directors. To style unissued stock treasury stock is a misnomer. (Conyngton.)

That portion of the paid-up stock of a company which reverts to the treasury, and thereby reduces the company's liabilities without impairing its assets; hence it is, that donated stock is unqualifiedly treasury stock, and that forfeited stock and repurchased stock are, in a measure, treasury stock. Unsubscribed stock, stock reserved by the incorporators for future sale, and unpaid subscribed stock are not treasury stock. (Rahill.)

Note: Several questions in C.P.A. examinations in different states treat unissued stock as treasury stock.

TRIAL BALANCE. A trial balance is a table of the balances shown on a ledger, for the purpose of trying their accuracy. When successfully compiled, it ceases to be a trial balance and becomes a statement of ledger balances.

TWO NAME PAPER. A note made by two persons as individuals or made by one and indorsed by another—these two persons being severally liable.

U

UNDIVIDED PROFITS. Earnings or profits which have not been divided among the partners in a firm or the stockholders in a corporation.

V

VOUCHER CHECK. A check which contains as part of the instrument a statement of the account covered by the check.

W

WILL. A last will and testament and all codicils.

A solemn declaration in legal form making a disposition of property to take effect at death, but revocable during life by the person making the will.

WORKING CAPITAL. That part of capital used in the active operations of a business. It may consist of (a) Capital stock subscribed and paid. (b) Capital stock sold to stockholders to raise cash. (c) Dividends or surplus undistributed. (d) Part of purchase money of a business allowed to remain unpaid. (e) Loans from bank or otherwise. (f) Proceeds of accommodation notes. (g) Proceeds of sale of bonds. (h) Assessment on stockholders. (American Encyclopedia.)

All assets available for the carrying on of a business, such as cash, accounts and notes receivable, and inventories. Those assets which are the subject of the company's business or may be easily converted into cash.

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